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THE BRANDT METHOD OF TREATING PELVIC DISORDERS IN WOMEN.

By C. E. Cooper, M. D., San Francisco, Cal.

Read before the San Francisco Academy of Medicine.

The attention which the medical profession, especially in Germany, has given to the treatment of the female pelvic organs by the Thure Brandt method, has suggested the propriety of a short paper upon this subject. In the reaction from the tendency to operate for almost all ovarian and uterine troubles, conservative methods are receiving more attention. While this method is still *sub judice*, the increasing literature and experience connected with it, seem to indicate that it will be accorded a place in rational therapeutics.

Briefly described, the method is a combination of the so-called "positional treatment" for displacements, Swedish gymnastics, passive motion, and massage. While Brandt himself lays almost equal stress upon each of these, the profession have looked with but little favor upon the gymnastics and passive motion. While they may possibly be aids to the cure of pelvic troubles, just as they may be in other ailments, they are difficult of application, except in hospitals, requiring cumbersome and unsightly apparatus, a large amount of time for their proper administration, and considerable muscular strength on the part of the operator. I shall, therefore, confine my attention in these notes to his more practical and valuable methods of positional treatment for uterine displacements, and the uses of massage as applied for troubles of the uterus or ovaries.

To apply Brandt's method, a couch or bench is required, preferably an inch or so lower than an ordinary chair. The patient lies upon her back, with the thighs flexed and the feet resting upon the couch, or upon the edge of a chair placed at the end of the couch. The shoulders are well raised by firm cushions, so that the abdominal muscles are relaxed as much as possible. The patient, in preparing for treatment, must remove the corsets and loosen all bands about the waist. A loose gown, made like a Japanese kimono, is convenient to slip on in place of the dress.

The operator sits at the left side of the patient, facing the couch. The fore and middle fingers of the left hand are introduced into the vagina, beneath the cervix, the left forearm passing beneath the patient's left thigh. With the left fingers he makes gentle traction upon the cervix, so as to stretch the adhesions which have drawn it out of place; or in other cases, the left hand simply supports the cervix and raises it, as we do in the ordinary bimanual examination. The operator's right hand is used to aid these maneuvres. With the abdominal muscles so thoroughly relaxed, the fundus of the uterus can be grasped with the right hand, and the traction on contracted ligaments is made with both hands in unison.

Most important of all in the Brandt method is the use of massage. It is claimed, and experience seems to verify the claim, that the amount of the blood supply to the uterus can be increased or diminished by this measure, depending upon the manner in which the massage is applied. Remembering that the uterine arteries reach the uterus on either side near its neck, we can easily see that if massage can be applied deeply enough to pass from the cervix to the fundus, we can increase the blood and lymph supply to the uterus. On the other hand, massage passing from fundus to cervix, will reduce the blood supply and overcome congestion. Since most uterine troubles are accompanied by congestion, the latter is the more general method, and it is in these two things, the overcoming of congestion and the absorption of exudates, that the treatment is most successful.

The *technique* varies with the nature of the case. For uterine congestion, the cervix is supported by the left fingers in the vagina, and massage applied by the right fingers, slightly flexed, describing small circles and passing from the fundus to the cervix. The duration of the treatment is, at first, about ten minutes, gradually increasing to twenty minutes, with daily applications. Under this manipulation, which must be very genttle at first, the tenderness rapidly grows less, and the organ perceptibly diminishes in size after about the fourth treatment. The backache, headache, and other symptoms referable to the uterus, also improve and finally disappear. The treatment lasts from three to six weeks. The congestion being relieved, a misplaced uterus is replaced with surprising ease in the position used in the Brandt treatment. After replacing, gentle traction is made each day upon the ligaments, and they are also massaged.

When adhesions exist, pelvic massage causes their rapid absorption, and usually after the first week of treatment the uterus can be felt to free itself from adhesions, sometimes directly under the hand of the operator. In cases of retroversion, massage is applied on the anterior aspect of the uterus, until it is freed from adhesion, and then upon the posterior aspect also.

The limits of this paper will not permit a description, in detail, of the application of this method for dysmenorrhea, amenorrea, prolapse of uterus, and other pelvic troubles. Those who are interested in the subject can find a full description in S. Alfred Resch's translation from the Swedish of Thure Brandt's brochure; or in Wood's Monographs for October, 1891. The method is now used and taught in the women's clinic in Vienna, and in some of the clinics of Berlin. The originator of the method was an enthusiast, who claimed too much for it, and loaded it down with perplexing details and gymnastics of comparatively little value. Clinical experience has demonstrated the value of the method, and in my opinion its keynote is very simple. Brandt has called attention to a new position for gynecological manipulation — one that makes it possible for us to apply massage to the pelvic organs in such a way as to modify their blood supply.

That being accomplished, the rest is easy. We can then overcome congestion, or its opposite condition; we can restore tone to relaxed ligaments; we can resolve adhesions, and incidentally relieve many of the distressing symptoms of pelvic troubles. It is in the hope of calling attention to the valuable part of this enthusiast's method that these notes are presented. We all know there are cases of pelvic trouble which are treated for years without material benefit, not severe enough to warrant an operation, but sufficiently severe to make the woman a burden to herself and to her friends. If the Brandt treatment will, as I believe it does, and as I have seen it do, relieve the symptoms of such a case, then it deserves recognition and a place in our scheme of treatment.

As contra-indications, the following may be mentioned: Pyosalpyrx is an absolute counterindication, and also malignant disease of the uterus. So is acute inflammation of any of the pelvic organs; also pelvic abscess; a recent typhoid, an appendicitis, dysentery, or anything which indicates danger of perforation of the gut, suggests the utmost caution. It follows, then, that this method is not suited to all cases of pelvic trouble. On the contrary, the cases to which it is applied must be very carefully diagnosed, and only selected cases are treated by this method. That, however, does not speak against it, but rather goes to show that it is an active measure. The same argument could be applied to opium, or strychnine, or any surgical procedure. In closing, I present, without comment, a case that I have treated by this method:

Mrs. S., age 34. One child ten years ago; miscarriage two years later, followed by pelvic peritonitis lasting four weeks and resulting in hyperplasia of uterus, retroversion, and displacement to right side, in which position it was so firmly fixed by adhesions that it could not be moved. She was treated for two months with applications of iodine and carbolic acid to endometrium, iodine to vagina, and glycerine tampons, but without benefit. She was then seen by a prominent gynecologist, who advised an operation to break up adhesions and stitch the fundus of the uterus to the abdominal wall. This she refused to allow, and she then came under my care. Wishing to give Brandt's method a fair trial, I stopped all medicine and local applications, and commenced a daily treatment. At first there was great tenderness, but this diminished after one week. On the fifth day, the fundus of the uterus being under the fingers of my right hand, I distincly felt the adhesions give way, peeling off from the uterus. At the same time she felt a sharp pain. I immediately stopped for the day, and had the temperature taken every hour, but there was no rise.

On the next day she again came to my office, and I found the uterus more movable, but with some local tenderness. I applied the treatment with great caution, fearing to set up a peritonitis. The tenderness gradually disappeared, and she made steady improvement. The uterus became more and more movable, until two months from the time she commenced treatment, when it could be freely moved from side to side, and the retroversion was corrected. The gynecologist who made the first examination made a second one at this time, and expressed the opinion that the uterus possessed a normal degree of mobility, and was free from adhesions. In the meantime, she had been able to resume her housework, for which she had been incapacitated, her weight had increased, her appetite improved, and the pains in the back diminished. Incidentally, a chronic constipation, from which she had suffered for years, was markedly improved, whether by the mechanical cause, or by the improved general tone of the muscular and nervous systems, I am unable to say. Since then she has had better health than for years before, and without medicine.

In my opinion, then, the Brandt method is a valuable means of treating selected cases of pelvic disease in women.

Crocker Building.

A CASE OF EXTIRPATION OF THE UTERUS PER VAGINAM FOR EPITHELIOMA OF THE CERVIX, COMPLICATED BY SARCOMA OF THE BODY.

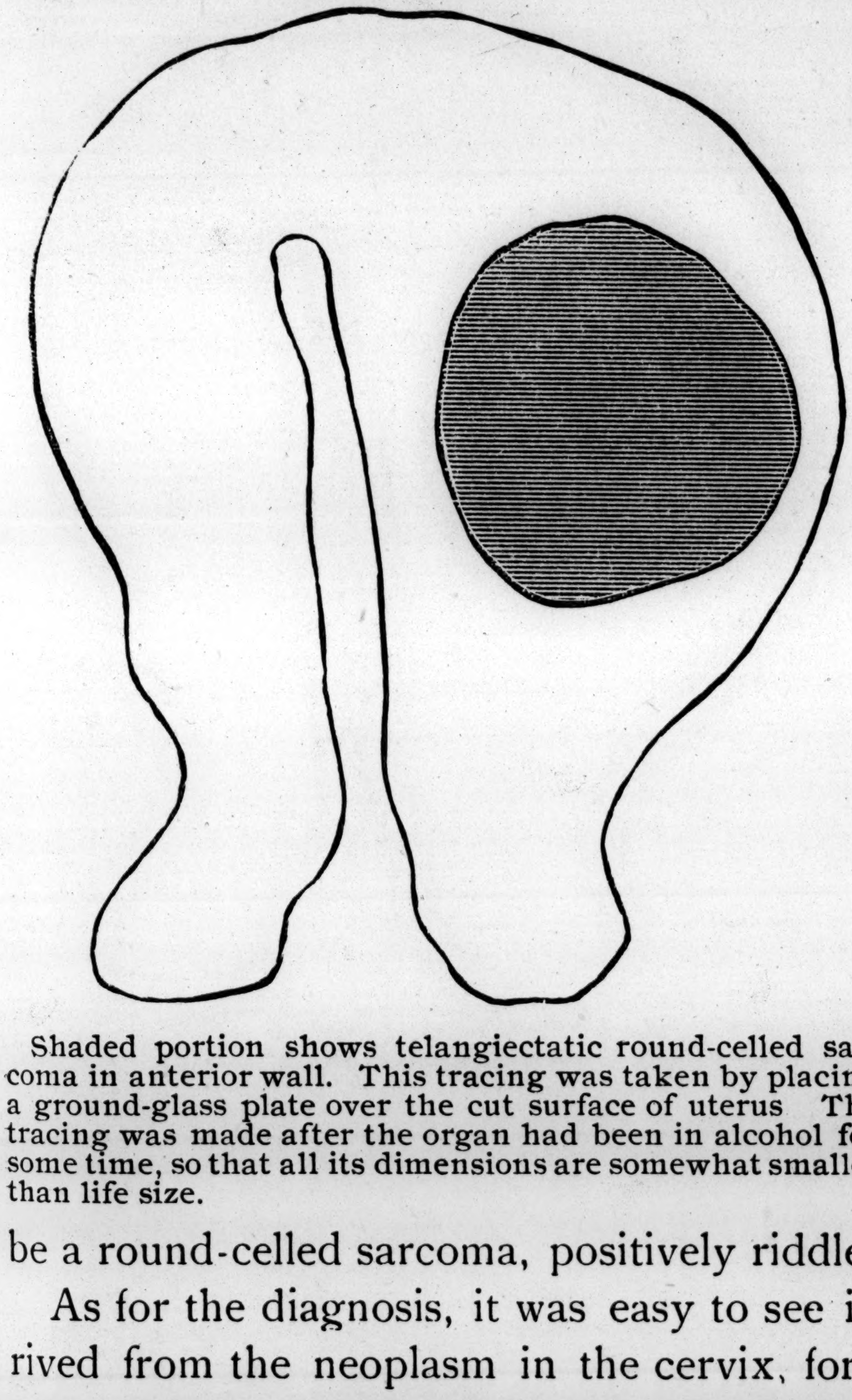
By D. W. Montgomery, M. D., Prof. Pathology and Histology, University of California, San Francisco, Cal.

On August 30th, 1889, Dr. H. Kreutzmann brought me two small pieces of tissue, curettings from the uterus of a woman who had applied to him for an opinion, and in whom he suspected cancer. One of these pieces was from the uterine cavity, and with the exception of a large number of blood vessels, appeared to be normal. The other piece was from the cervix at the place where the flat epithelium of the cervical portion changes into the glandular structure of the mucous membrane lining the internal surface of the neck. A large, thick mass of flat epithelial cells could be seen driven down into the subjacent tissue, and in one specimen there were branches given off from this mass running down still deeper; and far down in the tissue of the cervix there were alveoli filled with irregularly arranged, flat epithelial cells. Both Dr. Kreutzmann and myself looked carefully over the specimens, and came to the conclusion that we had to do with a very early, but, microscopically, clearly recognizable case of epithelioma.

A few days later, Dr. C. Cushing sent me a wedge-shaped piece of cervical tissue, which he had cut out for microscopical examination. I sent back a report that there was some epithelial infiltration extending into the submucous tissue; that it was slight but unequivocal, and that it therefore must be regarded as epithelioma at an early stage of its development.

It transpired in a conversation with Dr. Cushing relative to this case, that both examinations had been made for the same patient. Dr. Cushing removed the uterus and its appendages (both tubes and ovaries) some time in the beginning of September, within a week of the last examination.

After removal it was noticed the anterior wall of the uterus bulged forward decidedly, and on cutting the organ open anteroposteriorly, a dark-red, round, intramural tumor was exposed in the anterior wall. It was so imprisoned by the tissues composing the muscular wall, and so resilient, that when cut in two by the section which exposed it, it sprang forward like a compressed sponge, forming two large projecting masses. It was found to be a round-celled sarcoma, positively riddled with blood vessels.



Shaded portion shows telangiectatic round-celled sarcoma in anterior wall. This tracing was taken by placing a ground-glass plate over the cut surface of uterus The tracing was made after the organ had been in alcohol for some time, so that all its dimensions are somewhat smaller than life size.

As for the diagnosis, it was easy to see it was not an epithelioma derived from the neoplasm in the cervix, for it was not alveolar in structure, and was composed of young, round, connective tissue cells, which were not at all epithelioid in character. It was not a lymphoma, for there are no lymphatic glands in this situation, and none of the other superficial lymphatic glands of the body were affected. Tuberculosis and syphiloma (gumma) were excluded, because of the peculiar teleangiectatic blood vessels, and the absence of either the giant cells or the cheesy degeneration of tubercle, or the coagulation necrosis and low connective tissue of syphilis.

Forty-two months have now gone by without a relapse, a sufficient argument for early operation in such cases, and, furthermore, it illustrates the beneficial results of removing the whole diseased organ when attacked by malignant growths.

1124 Sutter Street.

THE THERAPEUTICS OF CHOLERA.

By Eustorjio Calderon, M. D. (University of Salvador, C. A.), San Francisco, Cal.

Read before the California Academy of Medicine.

We must now begin to consider the possibility that cholera may visit our country this year. Those who have the duty of watching over the public health will dictate regulations for the prevention of the scourge. In this paper I shall only consider the therapeutics of cholera as will likely be adopted by the general practitioner. It is painful to confess that the mortality of cholera to-day is about as high as it was fifty years ago, that is 50 per cent., as demonstrated by Hamburg's mortality of 42 per cent. and Altona with 61 per cent. during last year's epidemic.

My aim in reading this paper is to induce a discussion and to hear from the older members what means they adopted to cure a disease whose symptoms and treatment are known to the younger men only from books, and not from personal experience.

The summer heat, careless diet, or even panic during epidemics, can give rise to the prodromal diarrhea. This must be treated as soon as it appears, for it is impossible to foretell whether or not this prodromal diarrhea will develop into a case of genuine cholera.

The chief indications in the treatment of cholera are: (1) To check the reproduction of the bacteria in the bowels. (2) To neutralize the cholera-poison in the intestines. (3) To wash out the absorbed toxines from the blood. (4) To dilute the thickened blood in the tissues.

From these indications the prodromal diarrhea must be treated with one of two powerful disinfectants: calomel or bromol-bismuth. Calomel in fractional doses has long been known as an excellent remedy in summer diarrhea. Opium does not seem to be in accordance with the indications for treatment. It retards the movement of the bowels by paralyzing the intestinal nerves, and therefore, we would not only lose precious time by waiting, but the reproduction of the bacteria proceeds unchecked under the use of opium, and their products are absorbed by the intestinal mucous membrane. The idea that the mineral acids will cure cholera cannot be realized. These acids may prevent hemorrhages, the decomposition of the blood, and even act as tonics, but in making the intestinal contents thoroughly acid, the mucous membrane is irritated or injured, and this new condition is injurious to the patient. It will be found best to remain in bed well covered with hot sheets, or to take a hot bath.

The second period of cholera, where, in addition to diarrhea, vomiting and cramps set in, demands repeated rectal injections of tannic acid solution, a treatment upon which almost all physicians agree. Large quantities of a one-half per cent. tannic acid solution at a temperature of 100° to 102° F. are injected with an irrigator, the patient being placed upon the knees and elbows, and the injections repeated every two or three hours. Theoretically the tannic acid precipitates the formed toxines, but as the liquid does not go farther than the cecum, the action of the injections is only symptomatic. They are, in fact, a good help, because they wash out the noxious products in the lower bowel and regulate its secretions. These injections, after the third day of the disease, must be replaced by small, cold ones, which do not relax the muscles, but strengthen them. For vomiting: ice, cocaine solution in drops, or black coffee, can be given; champagne and alkaline mineral waters can also be tried, but pumping out the stomach must be avoided as unpleasant to the patient and dangerous through possible asphyxiation. Suppositories of codeine relieve the tenesmus. Internally, bromol-bismuth, in doses of 100 grains a day for adults, is useful. Patients can take 20 grains as an initial dose, and 10 grains each time subsequently, during the rest of the day. These doses are to be kept up for two to five days, and afterwards diminished. Calomel in large doses sometimes produces dysentry or nephritis; bromol-bismuth passes the stomach quite intact, and in the ileum where, when cholera has lasted some time, we find necrotic points on the mucous membrane, acts as a disinfectant and bactericide. Even after large doses of bromol the kidneys remain intact, and the drug appears in the urine. The bismuth binds the cholera toxines and at the same time covers the intestinal membrane with a protecting layer. Amongst other remedies, commonly employed, creolin produces such a disagreeable taste, and so increases the discomfort while vomiting, that patients refuse to take the drug. Salol, in large doses, produces nephritis.

I would suggest a trial of methylene-blue in the treatment of cholera, on account of its well known properties as a powerful plasmodia-killer in malaria, which has been demonstrated by Guttmann and Ehrlich.[1] Its property as a checker of purulent processes in consumption, abscesses, malignant tumors or torpid wounds and tissues, is also indicated. This drug, when absorbed, colors the excrements blue only after contact with the air. It appears in the urine, giving it an intense blue color. The quantity of urine is increased, so it must be considered a diuretic; no albumen is found after its use. Sometimes vesical irritation and tenesmus occur; patients taking the drug complain of having to pass frequently small quantities of urine. To prevent this complication frequent doses of powdered nutmeg, 15 to 30 grains each time, will be found useful. The ethereal oil of nutmeg does not act so well as the powder. Patients can take it in wafers or capsules, with one or two grains of methylene-blue in each dose, every hour, and in this manner patients can take 20 grains of methylene-blue in one day.

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[1] Berliner klin. Wochenschr., No. 39, 1891.

I suggest this treatment of cholera, because I believe it to be worthy of trial, and because the use of the drug in these doses cannot be followed by renal complications, as has been the case with salol and calomel. The drug, of course, must be pure, medicinal methylene-blue, and not the commercial article which contains chloride of zinc and usually produces vomiting and pain in the stomach. The pure drug is also a good antineuralgic, as demonstrated by Ehrlich and Leppmann,[1] and also by Robert Immerwahr.[2] We may therefore expect that methylene-blue may help in the treatment of cholera, giving at the same time relief from the painful cramps in the limbs.

Food, at this stage, must be given sparingly, the best being water containing some egg albumin. To guard against the coming stadium algidum, hypodermic injections of caffein, ether, or camphor dissolved in ether or in oil, may be employed. Rubbing with flannels or brushes, mustard plasters and hot-water bags to the extremities are useful.

In the third stage of cholera, when the pulse is imperceptible or very weak; when the blood is thickened in consequence of the great loss of fluid through diarrhea, the principal indication is to give back to the tissues and blood as much liquid as possible This can be accomplished by intravenous injections of hot salt solutions; but these can only be given in hospitals, and they require well-trained assistants on account of the dangers of infection, or of the entrance of air into the veins.

The general practitioner must rely only upon the subcutaneous injections of physiological salt solution, at a temperature of 100° to 104° F. For this purpose large hollow needles, with several side holes, or trocars, connected with rubber tubes of the style recommended by Dr. E. Braatz, of Heidelberg, are necessary. This apparatus allows us to use any bottle containing the salt solutions without having to carry an irrigator. Before the injection, the skin is to be cleansed, by rubbing it with ether, or better, with a 2 or 3 per cent. solution of lysol, a disinfectant which has the good property of producing a soap-like lather, and of cleansing the skin quite thoroughly. Usually two needles, or trocars, are inserted at the same time at different points of the body. Through each of these is injected at once two or three ounces of liquid, the absorption of which is assisted by massage. The points of election for these injections are the subclavian fossae, the sides of the abdomen near the groin, the inner side of the thighs, or the calves, where the injections relieve the cramps. The gluteal region, or the interscapular space, are not so good, as when the patient subsequently sits down or lies down the site of the injection is painful. We must carefully avoid injections in the neck, on account of the great danger of fatal edema of the glottis, which has followed a cervical injection.

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[1] Deutsche med. Wochenschr., No. 23, 1890.

[2] Ibid, No. 41, 1891.

The effect of the hypodermoklysis is wonderful; after a few minutes the radial pulse can be felt again; the patient is cheerful, the drowsiness disappears, the voice is louder, and this improved condition lasts for some hours, when, if the trouble begins again, the injections must be repeated. They are only symptomatic, but they are a great help. They give life to the patient until the crisis of the disease is over, in the same manner that digitalis or caffein gives strength in pneumonia.

In very bad cases of cholera, suppression of urine, unconsciousness, and fever, the so-called "cholera-typhoid," which is more or less accompanied by symptoms of uremia, may occur. For this condition; Barth, of Meraane, proposed injections of water into the bladder. This must be rejected because the altered mucous membrane does not absorb fluid, and the uremia is caused by the action of toxines upon the kidneys. A Belgian physician, in three cases of cholera, performed laparotomy, and opening the jejunum or ileum, allowed large quantities of disinfectant solutions to pass through the intestines for the purpose of washing them out and killing the bacteria. All three patients failed to survive such radical and heroic treatment.

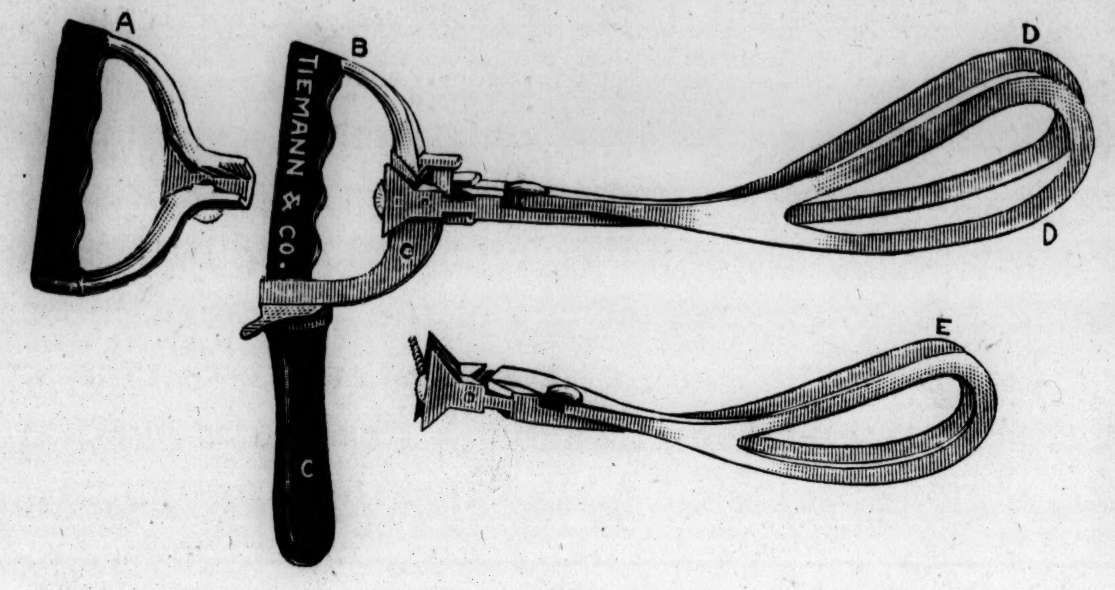
607 Sutter street.

THE OBSTETRICAL FORCEPS.

By Wallace A. Briggs, M. D.

Read before the Sacramento Society for Medical Improvement, March 21, 1893.

Convinced by a somewhat extensive obstetrical experience that the ordinary forceps possesses material defects that might be easily remedied, about four years ago I devised a forceps, and had it made by Aloe, of St. Louis. The original instrument, and the remodeled one of a later date, I present to you to-night. The former has served an excellent purpose on several occasions, as more than one member of this Society can testify from personal knowledge. The Tarnier attachment, however, seemed susceptible of improvement, and I therefore had it changed to the form in which you see it in the later instrument. As a mere matter of convenience I usually introduce the left blade first, and accordingly, contrary to the ordinary forceps, this constitutes the male blade. Occasionally it is convenient to reverse the order of introduction, and then to slip the handles by each other in order to lock the forceps. This is often difficult for the operator as well as painful for the patient, even with the ordinary handles, and would be doubly so with the handles of the instrument under consideration. To obviate this objection the handle of the right blade is made separable from the shaft without in any way impairing the strength or efficiency of the forceps.



The cut represents a slight modification of the forceps as exhibited to the Society and described in the paper—both handles being separable instead of one only.

The axis traction attachment consists of a bar that slips on the under surface of the left handle.

The ideal long forceps should possess these qualities: (1) Power. (2) Ease of application. (3) Conformity to the contour of the fetal head and to the curve of the pelvis. (4) Ease of regulating the amount of compressive force. (5) Ease of regulating the amount and direction of extractive force. (6) Ease of maintaining in an aseptic condition. (7) Adaptability to both high and medium operations. (8) Simplicity.

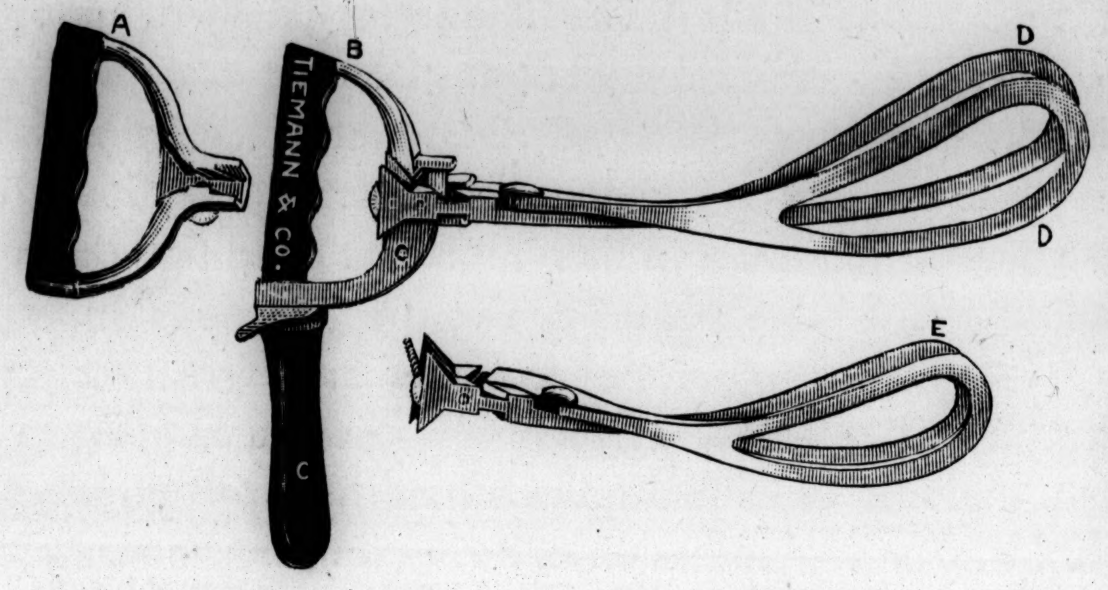
This instrument, I believe, possesses in a high degree all of the qualities I have enumerated. It possesses greater power, both compressive and extractive, than any other forceps. In the ordinary forceps the compressive force is applied not at any one determinate point whose distance from the fulcrum and whose relation to the blades (which here represent the long arms of counteracting levers) are known and appraised, but on the contrary is distributed over a distance measured by the width of the hand. The compressive power of the ordinary forceps, therefore, is practically indeterminate. The most powerful part of the hand is formed by the opposition of the thumb and the index and middle fingers. This part of the hand grasps the handles well down toward the fulcrum or lock. The compressive force, therefore, is applied not at the end of the short arm of the lever but chiefly at its middle point. Hence the compressive power of the ordinary forceps is not merely indeterminate—it is also feeble. In the forceps here presented, on the contrary, the compressive power is determinate since the compressive force is exerted on a certain line whose relation to the fulcrum and to the long arms of the levers is easily recognized and determined. Its compressive power is great, because the compressive force is applied at the end of the lever and not to its middle. This great compressive power may be regarded at first thought as a dangerous attribute, but two considerations will dissipate this suspicion. In the first place, the compressive force being more exactly estimated will not be so likely to be carried to a dangerous degree; in other words, it will be automatically regulated. In the second place, this instrument, like many others, is provided with a screw and nut that may be set at any point within the limits of safety.

The principle of axis traction, as promulgated by Tarnier, has been definitively accepted by the medical profession, but the original devices for its realization were complicated, cumbersome, and difficult of application. More recently, however, several efforts have been made to realize this principle by other means. Of these the most successful perhaps are those which consist of a supplementary handle extending at a right angle downward from the main handle. A modification of this supplementary handle I have adopted. It may be attached after either the partial or the complete introduction of the left blade, or even after the complete adjustment of the forceps, and therefore need not embarrass the operator in the slightest degree. This forceps, then, possesses the second quality—it is easy of application.

In an equal degree with any other forceps it possesses the third quality—conformity to the contour of the fetal head and to the curve of the pelvis. The fourth and fifth qualities (ease of regulating the amount of compressive force and the amount and direction of extractive force) it possesses, I believe, in a higher degree than any other forceps. The compressive force is exerted at a certain determinate distance from the fulcrum which is also at a certain determinate mean distance from the point of resistance—the fetal head. With a little preliminary study the compressive force may be easily and accurately estimated and applied. The extractive force is exerted in a direct line from the hand and not at a right angle as in the ordinary forceps. With this fact in mind a glance at the forceps will show that the extractive force is more easily applied, its amount more exactly gauged and its direction more accurately determined with this instrument than with any other.

Asepsis, reinforced when necessary by antisepsis, is the open secret of successful midwifery. An instrument therefore which cannot be easily and thoroughly cleansed should be unhesitatingly rejected. This forceps furnishes no small and inaccessible crevices for the lodgment of microörganisms and it may be wholly submerged in boiling water without injury. It may be as easily and thoroughly cleansed as the most approved modern forceps.

It is equally adapted to high and to medium operations—thus practically combining two instruments in one at a cost but slightly exceeding that of a single instrument. Finally, considering the purposes in view, this forceps is as simple as it can well be made. It is far simpler than the original Tarnier forceps and simpler than most of its modifications. When the head is at or near the pelvic outlet the short forceps is preferable. Here little force is generally required to supplement the uterine contractions and overcome the resistance of the perineum. Occasionthe handles of the instrument under consideration. To obviate this objection the handle of the right blade is made separable from the shaft without in any way impairing the strength or efficiency of the forceps.



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In an equal degree with any other forceps it possesses the third quality—conformity to the contour of the fetal head and to the curve of the pelvis. The fourth and fifth qualities (ease of regulating the amount of compressive force and the amount and direction of extractive force) it possesses, I believe, in a higher degree than any other forceps. The compressive force is exerted at a certain determinate distance from the fulcrum which is also at a certain determinate mean distance from the point of resistance—the fetal head. With a little preliminary study the compressive force may be easily and accurately estimated and applied. The extractive force is exerted in a direct line from the hand and not at a right angle as in the ordinary forceps. With this fact in mind a glance at the forceps will show that the extractive force is more easily applied, its amount more exactly gauged and its direction more accurately determined with this instrument than with any other.

Asepsis, reinforced when necessary by antisepsis, is the open secret of successful midwifery. An instrument therefore which cannot be easily and thoroughly cleansed should be unhesitatingly rejected. This forceps furnishes no small and inaccessible crevices for the lodgment of microörganisms and it may be wholly submerged in boiling water without injury. It may be as easily and thoroughly cleansed as the most approved modern forceps.

It is equally adapted to high and to medium operations—thus practically combining two instruments in one at a cost but slightly exceeding that of a single instrument. Finally, considering the purposes in view, this forceps is as simple as it can well be made. It is far simpler than the original Tarnier forceps and simpler than most of its modifications. When the head is at or near the pelvic outlet the short forceps is preferable. Here little force is generally required to supplement the uterine contractions and overcome the resistance of the perineum. Occasionally, however, even in these cases, the physician's strength and patience will be taxed to the utmost. Such a case recently came under my observation. The child was a large one and a tedious labor had brought the head to the inferior strait when the uterus became exhausted and progress ceased. I applied the short forceps but soon found that more than usual force would be necessary to complete delivery. It was obvious also that I was working at a great disadvantage. A strong grasp was necessary to keep the hands from slipping from the instrument and the instrument from the fetal head, and even then the feeling of insecurity was annoying; the strong traction and compression on the rough handles was painful; the suspicion that perhaps I was not master of the situation was anything but reassuring, and withal it seemed for a time that I should be compelled to remove the short forceps and apply the long one. The risk attending the extra manipulation deterred me, however, and finally after an hour's struggle the head was delivered. Although as strong as the average physician, I was completely exhausted by the prolonged nervous and muscular strain. Such extreme cases I am aware are not frequent, but similar ones of minor degree are by no means rare. To meet emergencies of this kind I have had made a short forceps on the plan of the long one that I have already described—obmitting of course the axis traction attachment.

In sum, the advantages of the forceps presented to you to-night are these: Great power, both compressive and extractive; perfect control of both the amount and the direction of the force applied; simplicty and ease of application. The consciousness of power, the feeling of mastery, is indispensible to the highest success in operative procedures. Believing that in the lying-in room these forceps, short and long, will materially contribute to this salutary feeling, I submit them to your present criticism and future experience.

REMOVAL OF THE GRAVID UTERUS BY ABDOMINAL SECTION.

By THOMAS MORE MADDEN, M.D., F.R.C.S. Ed.; Obstetric Physician and Gynecologist, Mater Misericordiæ Hospital, Dublin.

Read before the Royal Academy of Medicine, Ireland, April 21, 1893.

In a former volume of the Transactions of this Academy I reported a case in which I had been obliged to remove the gravid uterus. In the present communication I desire to submit the notes of a recent case of the same kind, and to offer some general observations on such operations.

In the last case referred to in which I was compelled to perform a Porro-Müller's operation, the patient was a woman aged thirty-three, two months pregnant, and of well-marked carcinomatous cachexia, suffering from a fast-growing uterine tumour, which, from the intense suffering it occasioned, the rapidity of growth (it having so developed from the time it was first recognized, only three months previously, so as to fill the abdominal cavity, and cause such dyspnœa as to prevent her sleeping save in a sitting position), as well as from the extreme emaciation and characteristic cachexia, I diagnosed as probably malignant. The symptoms being most urgent, and the patient being apparently *in extremis*, it was decided as a forlorn hope to give her whatever chance the removal of the uterus might afford. From the time of her being brought into hospital until she was placed on the operating table the patient was in a condition of extreme prostration from loss of rest, continual pain, and inability to take food, and was apparently kept alive by the free administration of stimulants. In that operation, which was performed on April 13th, 1893, I had the able assistance of my colleagues, Drs. Lentaigne and Coppinger, and also of Dr. A. Smith, of St. Vincent's Hospital. The enormous tumour here shown (tumour exhibited) growing from the fundus was partially gangrenous, and owing to extensive adhesions there was considerable difficulty in its removal and in the ligation of the ligaments. The operation was therefore necessarily prolonged; and though she recovered from the immediate shock, and for a couple of days gave hope of recovery, her condition of extreme prostration was never completely recovered from, and she succumbed at the end of a few days.

I am indebted to my colleague, Professor McWeeney, for the following brief note of the pathology of the growth.

"The tumour, which was of enormous size, grew from the fundus uteri, and consisted of two parts. The apexical portion—*i.e.*, that furthest removed from the uterus—was in a state of sloughy degeneration, and had softened down so as to form a sort of cyst, the wall of which was composed of discoloured and unhealthy peritoneum. This portion passed gradually, and without any definite line of demarcation, into the proximal or basal portion of the growth. The latter consisted essentially of unstriped muscular fibre and connective tissue, associated in varying proportions. The most deeply situated portion had undergone mucoid degeneration, so that the middle of the tumour was channelled with numerous inter-communicating cavities, filled with glairy fluid. Hence the growth may be regarded as a monstrous, non-pedunculated fibroid."

The excision by abdominal section of the gravid uterus above the cervix, which is generally known by the name of the operator, Professor Porro, of Pavia by whom it was first successfully accomplished in 1879 (though previously performed by Dr. Storer, of Boston), was originally designed as an obstetric operation in lieu of the Cæsarean section. It has been subsequently considerably modified and improved in its technique by Freund, of Breslau, and Müller, of Berne, to whose operation, with some further modifications, I have myself resorted in three cases of pregnancy complicated by urgent symptoms arising from malignant, or supposed malignant, disease of the fundus or body of the uterus.

Premising that the Müller-Porro operation consists essentially in making a large abdominal wound, with the view of excising the gravid uterus and securing the cervix by *serre nœud*, ligature, clamp, or otherwise, previous to opening the cavity and removing the child, I may now describe the steps adopted in the method followed by myself in the cases referred to. The preliminary measures—directions concerning arrangement of operating room, position of patient, choice of anesthetics, and antiseptic precautions necessary in a case of abdominal hysterectomy—being identical with those in ovariotomy, need not be here detailed. Taking it for granted, therefore, that these preliminaries have been properly carried out, and that the patient about to undergo removal of the uterus has been fully anesthesized, and placed in proper position on the operating table, the first step in the operation, after the bladder has been emptied by the catheter, is the incision through the abdominal parietes, by which the peritoneal cavity is to be laid open and the uterine tumor exposed. This incision along the linea alba from an inch below the umbilicus to an inch above the pubis, differs from that generally necessary in ovariotomy in being necessarily of much greater length, so as to facilitate that free intra-peritoneal manipulation by which in hysterectomy the uterus is to be liberated from adhesions, and the broad ligaments ligated and divided.

2. As soon as the uterus has been thus brought into view any morbid adhesions to the bladder or other viscera are to be cautiously, and if possible, manually broken through, and any bleeding points or thick bands of adhesion so broken securely ligatured.

3. The uterus is now to be drawn upwards and forwards, so as to put the broad ligament and cervix somewhat on the stretch.

4. The broad ligaments are then to be *seriatim* transfixed by a blunt pedicle needle armed with double strong silk sutures, by which the ligaments should be firmly ligatured in two or three divisions. Immediately below these another stout ligature should be encircled around each ligament. These latter ligatures must then be confided to an assistant, by whom, before the closure of the abdominal wound, the remaining portion of undivided broad ligaments should be again drawn into view, prior to the sutures being cut to insure that the included vessels are effectually closed. The same object may also be accomplished by the use of either Reeves' hysterectomy forceps, Storer's clamp shield, or Wells' compressing pedicle forceps.

5. The broad ligaments may now be divided above the sutures by a scissors on each side of the uterus, which, together with the included ovaries and Fallopian tubes, now remains attached only by the cervix.

6. The cervix may now be included either in a *serre nœud* or a hysterectomy clamp forceps, sufficiently low down to allow its transfixion, partly by a blunt-pointed pedicle needle armed with double stout wire

or carbolized silk suture, so strong as to allow of that force by which the ligatures can be so tightened as to obviate slipping and consequent hemorrhage from the subsequent retraction of the undivided tissues. In this way the cervix must be ligated in two portions. Below these ligatures two transfixion pins should be passed at right angles through the cervix, and below these again it should be tightly encircled by a stout silk or carbolized whip-cord ligature.

7. Above all these ligatures, the uterine cervical zone is now to be slowly divided by a strong, round-pointed scissors and removed.

8. The cervical stump or pedicle may then be treated either by searing it with thermo-cautery, as in my last case, or, as in my previous ones, closed by the flap operation and covering it with peritoneum by fine silk or gut sutures. The clamp forceps can now be relaxed, and, if there be no hemorrhage, the cervical stump should be secured either by the transfixion pins or by clamp in the lower angle of the abdominal incision, where, after the closure of the upper part of the wound, having been freely dusted with iodoform, it must remain to be treated extra-peritoneally.

9. The abdominal cavity is then to be flushed out with warm boric solution, after which, the sponges and forceps having been carefully counted to prevent risk of any being left behind, and the ligatures having been also looked to, the abdominal wound may be closed and dressed as in an ovariotomy, except in one respect—that is to say, in Porro's operation the lower angle of the wound must remain unclosed to allow space for a drainage-tube, as well as for the cervical pedicle, which must, as I have said, be treated by the extra-peritoneal method. This is conceded by the great majority of authorities, although my friend Dr. McArdle, himself a successful operator, in such cases still rather favors the intra-peritoneal method in this operation as in ovariotomy. One of the many differences, however, between these procedures is the extreme difficulty generally experienced in preventing hemorrhage from the pedicle in the former, and hence the advantange of having the cervix in view after Porro's operation in case any such hemorrhage should occur.

It is needless to add that during and after an operation, is unremitting attention to perfect asepsis, and to all antiseptic precautions, more essential than in that which I have now described my method of performing.

This operation differs, as will be seen, in several respects from Müller's modification of Porro's operation. It is still more distinct from Freund's operation for the extirpation of the non-gravid uterus, with which, as an examiner, I have found the latter procedure is not infrequently confounded. To illustrate clearly that distinction I shall, therefore, here briefly describe Freund's operation as performed in a case under my observation. In Freund's method of hysterectomy, the abominal cavity having been laid open, as in ovariotomy, the broad ligaments are transfixed and ligatured in two or three portions on either side, so as to secure above the sutures the Fallopian tubes and ovaries, and to seal the ovarian and uterine vessels, the lower ligature being brought out into the vagina. The uterus is now cut away from its vaginal and ligamentous connections and withdrawn through the abdominal wound, which is subsequently closed, as in ovariotomy; whilst the ends of the remaining ligatures in the broad ligaments are brought down into the vagina, about which the anterior and posterior layers of pelvic peritoneum are previously brought together by silk or gut sutures, so as to close the peritoneal cavity, a drainage tube being then left in the vaginal wound. My own opinion and very limited experience of Freund's method of abdominal hysterectomy is similar to that of many other surgeons by whom some years ago it was more largely resorted to, and by most of whom (although more facile than vaginal hysterectomy, and possibly capable of some future improvement), owing to its terribly unsuccessful results—the consequent mortality being over 70 per cent.— it has been generally abandoned.

On the other hand, the mortality of Poro's operation under the most favorable circumstances that is in obstetrics where the condition of the uterus presumably is a normal one, is 56 per cent.; hence the results of my cases of removal of uterus for such disease as existed in all these cases—being a mortality rate of 66.6 per cent., considerably less than that of Freund's operation—are by no means exceptionally unfavorable when we consider the circumstances of these cases and the condition of the patients so operated on, as the last possible chance of relieving suffering and prolonging life in cases apparently otherwise beyond hope. At the same time I must add that I think it only justifiable to perform such operations, as was the case in the three instances above referred to, in compliance, as a *dernièr resort*, with the entreaty of a patient fully aware of all the risk of the procedure and beyond other methods of relief.

Finally, in this connection it may be added, that in obstetric practice, for which primarily designed as a substitute for Cæsarean section, there can be no ground nowadays for recourse to either Porro's operation, or any of its subsequent modifications. Inasmuch as within the last few years, owing mainly to the improvements in the technique, and consequently in the results, of the oldest of all intra-peritoneal operations, effected by Professor Sänger, of Leipsic, and also, and above all others, by Professor Murdoch Cameron, of Glasgow, the Cæsarean section (my first case of which was reported in my chapter on this subject in "The Dublin Practice of Midwifery," published twenty-one years ago) has been robbed of its former terrors. No triumph of modern abdominal surgery has probably been equal to that which has taken place in the performance of this operation by the method of Cameron, by whom the Cæsarean section has been accomplished in 20 cases with only 2 deaths, being a mortality hardly greater than that generally obtained in ordinary ovariotomy. With that method thus available, and with the exceptional experience of Cameron to guide us, it is, I think, therefore evident that we would no longer be justified in obstetric practice, in resorting, whether by Müller-Porro, or any other method, to an operation so terribly fatal as the removal of the gravid uterus has always proved, and must always remain.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M. D., Sacramento, Cal., and
HENRY GIBBONS, JR., M. D., Professor of Obstetrics and Diseases of Women, Cooper Medical College, San Francisco, Cal.

Twelve-Pound Fibroma of Labium Removed During Pregnancy.—DR. J. J. MCKONE reports (Transactions Medical Society State of Washington) a case of fibroma of the labium majus successfully removed during pregnancy in which the tumor weighed 12 lbs. The patient when nine years old had noticed a lump on the left labium which the parents called a birth mark. This had slowly increased in size though causing no pain until the past year. It always grew faster during pregnancy and with exceptional rapidity during the present (her seventh) pregnancy. Attached to the left labium for its whole length was a mass the size of a man's head, in shape not unlike that of a bunch of grapes and covered by skin like that of the scrotum. At the lower and posterior surface the mass was black and suppurating and had been bleeding freely during the day. The pedicle was eight inches in circumference and pulsating freely at its lower end. There were two large and tender glands in the groin giving some impulse on coughing, which, with the intense vomiting and pain, suggested the possibility of a hernia in addition. Thorough examination showed that this was not present. The temperture was 103° F., pulse 120 and no nourishment had been retained for five days. Patient readily consented to removal, which was effected in the following manner: A rubber tube was thrown round the pedicle as near the body as possible and a second close to the tumor. The growth was then dissected down upon as in an operation for hernia until it was demonstrated that there was nothing to fear, when the pedicle was amputated as close to the tumor as possible. The rubber band controlled the bleeding perfectly. About twenty small and three large vessels required ligation. The wound was closed with a continuous silk suture and a gauze drain inserted at the lower angle. The temperature dropped to normal after the operation but the vomiting continued for forty-eight hours. The woman made an uninterupted recovery, and was delivered at term, of an eleven and a half pound child. A microscopical examination showed that the tumor was a true fibroma. Dr. McKone states, from an examination of the literature of the subject, that this is the largest tumor of the kind recorded.

Treatment of Chronic Metritis.—DR. LUTAUD proposes the following method: (1) Gradual dilatation with laminaria tents. (2) Irrigation of the uterus with a double current catheter. (3) Introduction into the uterine cavity of aseptic and medicated sponges, and applications of substitutive agents to the diseased mucosa. (1) *Dilatation.*—By using the speculum, and seizing the anterior lip of the cervix with the volsellum, more or less strong traction may be exerted, which straightens the uterine canal and permits the tent (previously rendered aseptic by soaking five minutes in a sublimated solution 1:1000) to be introduced without pain. It should never be left in position longer than ten hours, and two or three tents, each larger than the last, are generally required. (2) *Irrigation of the Uterine Cavity.*—Reverdin's double-current catheter is best for this purpose, as it separates the uterine walls and allows thorough irrigation with two litres of very warm liquid (about 38° C). A 3 per cent. solution of carbonate of soda may be recommended for its mucodissolvent properties, but if the uterus is infected, the following mixture is more efficacious:

Naphthol		
Salol		
Chloral	*āā* gm.	5
Alcohol	gm.	250

One coffee spoonful in 1 litre of boiled water.

(3) *Modification of the Uterine Mucosa.*—Ordinary sponges should be soaked in a solution of naphthol, or sublimate, until they are completely expanded; should then be compressed, cut in cone shape in the ordinary manner, and preserved in wide-mouthed jars filled with iodoform, or with salol (preferably iodoform). The introduction of one of these sponges, rendered easy by previous dilatation and irrigation of the uterus, constitutes a very useful and very active remedy, generally successful in metritis of moderate intensity. The sponge should be left in place about six or eight hours, and the uterus again irrigated after its withdrawal.

In fungous hemorrhagic metritis, this treatment is insufficient, but the sponge may be used in applying caustics to the uterine mucosa. It should be left two minutes in the following solution:

Salicylic acid	gm.	1
Alcohol	gm.	10
Water	gm.	240

If kept in the liquid longer than is necessary to thoroughly wet the surface, it will lose the consistency necessary to its easy introduction. The sponge must not remain in the uterus more than eight hours, and its removal should be followed by the irrigation previously described. This method is preferable to the usual one, (*a*) because it causes no pain. (*b*) It thoroughly fills the uterine cavity, and thus carries the remedy to the smallest folds of the uterine membrane. One application usually suffices, but in obstinate cases two or three sponges, always followed by irrigation, may be introduced at intervals of two or three days.—*Journal de Médicine de Paris*, February 5, 1893.

Hydrastinine in Uterine Hemorrhage.—According to Cocq, of Brussels, hydrastinine produces persistent anemia of the uterus, when frequently administered in small doses, amounting to 5 to 10 centigrammes a day. It acts upon the vessels rather than upon the uterine muscle, and owes its efficacy in gynecology to its ischemic properties. It relieves only hemorrhage of the body of the uterus, and hemorrhage of the cervix, caused by ulcerations; ectropions injuries, or tumors, require local treatment and operative interference. It goes without saying that hydrastinine is not indicated in all kinds of hemorrhage of the uterus itself. Cocq makes the following classification: (1) Simple menorrhagia and (2) simple metorrhagia without lesions of the organ. (3) Hemorrhage caused by active or passive congestion of the uterus, depending upon its displacement, or upon some pathological process in its vicinity. (4) Hemorrhage due to acute or chronic inflammation of the organ (metritis or endometritis). (5) Hemorrhage brought on by uterine tumors. (6) Hemorrhage following labor or abortion, caused by incomplete involution of the uterus, or by retention of the placental debris. Hydrastinine is beneficial: (1) In hemorrhage without lesions of the uterus, whether caused by puberty, by the menopanse, or by hemophilia. (2) In congestion caused by pathologic processes in the vicinity of the organ, when the primitive affection must be treated according to circumstances. (3) In non-fungous inflammation of the uterus. (4) In fibroid tumors, though more active remedies are necessary when hemorrhage persists or pain results from pressure. On the other hand, hydrastinine is without efficacy in metorrhagia when due: (1) To retroflexion, which necessitates reduction of the organ and the application of Hodge's pessary. (2) To fungous endometritis which curettage alone thoroughly relieves. (3) To the retention of placental debris, which also requires curettage. (4) To subinvolution of the uterus, which calls for warm injections and the administration of ergot. Certain cases of uterine atony can only be successfully treated by the constant current. Hydrastinine may be given in hypodermic injections or in pills.—*Journal de Médicine de Paris*, April 9, 1893.

Typhoid Fever in Puerperal Women.—It has long been known that typhoid infection is rare in pregnancy, and that even when established, is not rendered more serious by the puerperal condition. But on the other hand, typhoid fever causes abortion or premature labor in about two-thirds of the cases, the more surely in the earlier months. This accident oftenest occurs from the third to the sixth month of pregnancy, and from the second to the third septenary of fever, though it is not unknown in convalescence. Although it is so generally admitted that this disease is not more than usually dangerous to pregnant women, prognosis becomes more unfavorable when it attacks the patient in the early period of lactation, though the cause of the difference is not well established. According to Carret, the affection under these circumstances is insidious, and may simulate septicemia, when danger is usually great. Homolle thinks the puerperal condition renders the outlook more unfavorable, but neither of these authors assigns a reason for the special severity of typhoid fever in these cases. The gravity of the malady depends less upon complications than upon exaggerated symptoms, and may not these depend upon the modifications of the hepatic gland which occur during pregnancy, the normal functions of this organ and its lesions during infection by the Eberth bacillus? Siméby's researches (in 1872) showed that lactation is accompanied by fatty degeneration of the lobules of the liver. On the other hand, MM. Seredey-Legry observed a slight granular fatty condition of the periphery in typhoid fever. It would seem, then, rational to admit that the liver, thus weakened by lactation and the typhoid processes, is unable to play the part of protector from the poisons brought to it by the portal vein. These toxic products, with their generative microbes, exist in great quantities in the intestines during typhoid fever, and, as the system is thus deprived of a part of its defenses, the patient very often succumbs. Here, as under other circumstances, according to M. Hunot, the prognosis of his disease depends upon the condition of thehepatic gland.—*L' Union Medicale*, March 11, 1893.

Placenta Praevia.—AHLFELD reports the case of a woman 39 years old, almost at term, who had suffered from profuse hemorrhage throughout her pregnancy, and who was greatly reduced by three attacks after her admission to the hospital. The membranes, which could be felt just back of the symphysis pubis were ruptured, and a living child slowly delivered. The placenta, brought away by pressure upon the body of the uterus, was found to be absolutely intact and in the form of a triangle, with the apex near the internal orifice. Its base measured 17, one side 14½, and the other 12 centimetres. Its weight was 550 grammes, corresponding to the weight of the child (3180 grammes). The cord was inserted 3½ centimetres from the top and 4 from the side. As there was no opening other than that made by the *accoucheur*, and this opening corresponded to the apex, it follows that the apex was just above the internal orifice. The distance from the apex of the placenta to its base was 10 centimetres; as the height of the uterus from the internal orifice was 28 centimetres, we may conclude that the placenta occupied only the lower third of the uterine cavity, adhering to its posterior and lateral walls. On examination, 9 days after delivery, the cervix easily allowed the passage of the finger, and the internal orifice was still in the form of a ring. The zone of placental adherence occupying the inferior third of the posterior and lateral walls, and measuring about 3½ centimetres in height, could be clearly felt. Twelve days after labor the uterus was found still smaller, and the height of the placental zone estimated at 2½ centimetres. Ahlfeld regards this case as proof that the ovum is first inserted in the lower third of the uterine cavity.—*Journal de Médicine de Paris*, April 9, 1893.

Total Extirpation of the Uterus.—DR. HERZFELD'S new method of extirpating the uterus, analagous to the sacral operation of Teraske-Hochenegg, is as follows: After a median incision in the sacral region near the anus, laying bare the coccyx, which is sometimes removed with the last sacral vertebra, open the peritoneum between the rectum and vagina. The uterus should then be withdrawn. To prevent infection, the operator may close the peritoneum by suturing its rectal border at the site of the original incision to its vesical border as it is reflected from the uterus. Hochenegg, however, attaches little importance to this precaution. The extirpation of the uterus takes place outside the peritoneum. Four out of six cases of this operation resulted in recovery, one patient dying of cachexia, and the other of an abscess caused by a pyosalpinx. This method is indicated when the uterus is very large, when the body of the organ has become diseased, and when the cancer has invaded the vagina or parametrium. Hochenegg operated in 22 cases, with 18 cures and 4 deaths, and claims priority in the sacral method.—*La Médicine Moderne*, January 21, 1893.

SURGERY.

By T. W. HUNTINGTON, B. A., M. D., Surgeon Southern Pacific Company's Hospital, Sacramento, Cal.,

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Chronic Acquired Talipes Successfully Treated by Operation.—In a report of three cases treated by DR. HENRY O'NEILL, the operations were conducted on the simplest principles: (1) The limbs were rendered bloodless by applying Esmarch's bandage. (2) Methylene was used as an anesthetic in two cases and in the third ether spray was applied locally. He considers methylene the best anesthetic in these short operations. (3) The contracted plantar fascia and tendons on the sole of the foot, in one case, were cut subcutaneously, one week before the tendo-Achillis; because the toes and anterior part of the foot can be more thoroughly straightened by the "wrench" while the heel is held firmly by the tendo-Achillis. (4) Each foot was thoroughly massaged, forcibly straightened, and put in proper position daily (after the skin wound had healed) for three weeks, and in one of the patients for four weeks, after the operation. Thomas' wrench was found to be a most useful instrument for forcibly stretching the foot after operation. (5) The patients were recommended to walk as much as possible every day, and continue the massage for at least two years after operation.—*British Medical Journal*, March 4, 1893.

Cerebral Surgery.—In a joint paper upon this subject, DR. CHAS. MCBURNEY and DR. A. ALLEN STARR say that from the reports of current literature the number of cases of tumor of the brain in which surgical relief has been attempted, is 87. Seventy-four of these were tumors of the cerebral hemispheres and 13 tumors of the cerebellum. The percentage of recoveries, after the successful localization and removal of the tumor, is 46. The diagnosis between tumors situated in the cerebrum or cerebellum is perfectly easy and the risk of operation so different as to demand their separate consideration. In 74 tumors of the cerebral hemispheres treated surgically, 16 were unsuccessful, 57 were successfully located and removed; 38 of the patients recovered and 19 died. Of these 57 tumors, 34 were removed from the motor (central) region of the brain. The location of the tumor in the remaining 23 cases were as follows: In the frontal region 6, in the parietal region 3, in the occipital region 1. It is impossible either to satisfactorily diagnose or to remove tumors lying on the median or basal surfaces, and no attempt at such removal has been made. In the surgical treatment of 13 cases of cerebellar tumor, 2 cases only were successful, and in 7 the tumor was not reached. In the removal of tumors from the brain, death has resulted in 54 per cent. of the cases, either from sepsis, hemorrhage, or shock, or from two or all of these causes combined. In entering the skull, the author recommends the method suggested by Waggoner. It consists essentially in cutting through the skull with the chisel in the line of the scalp incision, the scalp flap not having been turned back. This bone flap, with scalp flap still attached, is then pried up and turned back, thus exposing as large an area of dura mater as the original incision outlined. The dura is opened by cutting directly down upon it with the knife, from an eighth to a quarter of an inch away from the bony margin, then small blunt scissors may be introduced and a flap similar in shape to the bone flap, turned back. Color, consistence, bulging, and pulsation of the brain surface are now determined. Encapsulated tumors are easily enucleated with the finger or blunt scissors. When to stop in attempting removal is difficult to decide when the growth infiltrates the brain substance. As a rule it should be complete, for infiltrating tumors are almost certain to recur at an early date. Drainage is best effected by an aseptic strip of thin rubber tissue, folded upon itself once or twice. Free hemorrhage may be controlled by compression with gauze packing. The advantage of the large single bone flap is that the osseous plate with pericraneum undisturbed and integument undissected is turned back into place and fits accurately. The skin may be stitched, provision being made for drainage. Of 13 cases of operation for cerebellar tumors, in 6 the tumor was not found and the patient died. In one case the tumor was found, but the patient lived up to the time of report.

In 2 cases the tumor was removed but the patients died. In 2 cases it was found but could not be removed, and the patients died. In 1 case it was found, not removed, but the patient lived. In but 1 case was the tumor successfully removed. The percentage of deaths after cerebellar operations thus far has been 77 per cent., while that after cerebral operations has been 51 per cent. Experience will, doubtless, result in a more favorable outcome as time goes on, and neither neurologists nor surgeons should be discouraged in their attempts to relieve a formerly fatal disease.

The Modern Treatment of Sprained Ankles.—DR. V. P. GIBNEY has for the past four years relied chiefly on the use of an adhesive-plaster supporting dressing, which was called to his attention by a book written by Mr. Edward Cotterell, of London. Previous to this time he had looked upon a sprain as a kind of mystery, "not always so bad as a fracture, but sometimes more tedious," requiring fomentations for a little while, then a fixed dressing of plaster of Paris or silicate of sodium, crutches perhaps, with rest and massage afterwards; and had come to expect a "stiffish" joint in nearly every case that came under his charge. In cases where no dislocation or fracture can be made out, strips of adhesive plaster, about half an inch wide and long enough to completely encircle the foot, are applied, commencing at the outer side of the foot, near the base of the little toe, each piece overlapping the other, until there is practically constructed a Scultetus' bandage of adhesive strips extending far enough to include the lower third of the limb. Over the whole is placed a cheesecloth bandage to help the plaster strips to adhere to one another and to make the dressings more tidy. The patient is told to put on stocking and shoe, and walk about the room. At first this is accomplished with some diffidence but with no real difficulty. The recoveries are usually without relapse, and the usefulness of the ankle joint is unimpaired. This plan of treatment has the advantage of entailing the minimum amount of enforced detention from the ordinary pursuits of life and does not tend to leave a stiffened joint.—*New York Medical Journal*, May 13, 1893.

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M. D., Sacramento, Cal.

Toxic Amblyopia from Iodoform.—DR. PRIESTLEY SMITH gives the history of a patient under treatment for chronic tubercular pleurisy and peritonitis, who took about 1,000 grains of iodoform during forty days, when it was stopped on account of toxic symptoms, especially amblyopia. The onset of the amblyopia was associated with headache, giddiness, and faintness, the latter being due, probably, to a weak heart; also with diarrhea. A constant taste and smell of iodoform, twitching of the hands, and emotional depression; the urine was also changed from high acidity with uric acid and urates, to alkalinity with triple phosphates. On the third day after the iodoform was stopped, there was great drowsiness and slight left ptosis. Four days after the iodoform had been discontinued, Dr. Smith examined the patient in regard to his eyes. In both eyes there was slight haziness of the disc margins, but no pronounced papillitis. Vision was greatly impaired, a well marked central scotoma, absolute for white paper at or near the fixation point, being present in each eye. Tested with red, the scotoma seemed to be larger than those commonly found in tobacco amblyopia. The loss of vision began a day or two before the iodoform was stopped, and while the patient was taking the maximum quantity of 32 grains a day, and rapidly increased from day to day. Four weeks later there were color scotoma in both eyes, with a very small absolute scotoma just below the fixation point. Vision R. $\frac{6}{36}$, L. $\frac{6}{24}$. The patient then received subcutaneous injections of strychnine for a week, and later iron and strichnine by the mouth. Three months after the onset of the disease, vision $=\frac{6}{8}$ in each eye, and no scotoma could be found. The author mentions the cases reported by Dr. Hirschberg and Dr. E. Hutchinson.—*The Ophthalmic Review*, April, 1893.

Indications for Enucleation of an Eye.— DR. EDWARD JACKSON summarizes the indications for enucleation as follows: (1) The presence in the eye of a malignant new growth, as glioma, sarcoma, or tuberculosis. This indication is imperative, no matter how much vision the eye retains. (2) The presence in the eye of a foreign body, with irido-cyclitis. If the injury be recent, and the inflammatory process still active, and the patient cannot remain under observation, an eye with anything less than thoroughly useful vision, should be sacrificed. (3) The presence of a foreign body in a blind eye. (4) Blindness with diminished tension of the eyeball, following perforation, either by traumatism or corneal ulcer, most urgent after traumatic perforation of the exposed portion of the sclera. (5) Blindness, the result of irido-choroiditis, without perforation of the eyeball, if the patient cannot remain under observation. (6) Sympathetic inflammation, provided the exciting eye does not possess vision sufficiently good to be weighed against the chances of the sympathizing eye. (7) The actual presence of sympathetic irritation; not the risk of it, unless the patient is going to be out of surgical aid. (8) Persistent pain in a blind eye, sufficient to annoy its possessor or tempt him to the use of analgesic drugs. (9) Serious disfigurement of a blind eye, even if free from pain or risk of causing sympathetic disease.—*Philadelphia Polyclinic*, April, 1893.

The Influence of Nasal Affections Upon the Respiratory Apparatus.—DR. F. CHABOSY says that three things are necessary to produce asthma: (1) The presence of polen in the atmosphere, which excites the disease. (2) An altered condition of the nasal mucous membrane. (3) A nervous temperament of the subject. To cure the trouble, the patient must leave the place in which he is exposed to vegetable dust, treat the diathesis, prescribe hydro-therapeutics, mineral waters, and in case it is needed, the nasal mucous membrane should be deeply cauterized. Nasal cough is also occasionally found. The cough has a metallic timbre, and is diagnosed by the absence of expectoration, by exclusion, and by the aid of cocaine. Laryngitis stridulus arises from reflex nasal irritation. Laryngitis and bronchitis are frequently secondary to lesions in the nose. Tracheal ozena and blennorhea of Stoerk may extend from similar disease in the nasal cavity. Affections of the nasal mucous membrane play an important part in the production of tuberculosis of the lungs.—*Gazette des Hôpitaux*, May 4, 1893.

Legislation for the Protection of the Eye.—The Maine Legislature at the last session passed the following law: Section 1. Should one or both eyes of an infant become reddened or inflamed at any time within four weeks after its birth, it shall be the duty of the midwife, nurse or person having charge of such infant, to report the condition of the eyes at once to some legally qualified practitioner of medicine of the city, town or district in which the parents of the child reside. Sec. 2. Any failure to comply with the provision of this Act shall be punishable by a fine not to exceed one hundred dollars, or imprisonment not to exceed six months, or both. This law was modeled after a similar law placed on the statute book in New York in 1890, and was, no doubt, prompted by the fact that blindness, or serious disease of the eyes, dates in many cases from birth, and could be avoided by prompt medical treatment. Legislation of the same character will be proposed in other States at the next session of the Legislature.—*North American Practitioner.*

Diseases of the Iris.—In an analysis of ten thousand cases of eye disease, seen in private practice, DR. R. BRUDENELL CARTER makes the following statements in regard to iritis: There were 262 cases seen—147 in males and 115 in females. They may be classified as follows: Acute iritis of distinctly syphilitic character occurred in males in the right eye alone, in 9 cases, in the left eye alone in 8, and in both in 7 cases; total, 24. It occurred in females in right eye alone in 2 cases, and in both eyes in 4; total, 6; a total for both sexes of 30. Acute iritis, certainly or apparently non-syphilitic, occurred in males in right eye alone in 26 cases; in the left eye alone in 17 cases, and in both eyes in 28 cases, total, 71 cases. It occurred in females in the right eye alone in 21 cases, in the left eye alone in 16 cases, and in both eyes in 21 cases; total, 58; a total for both sexes of 129. Posterior synechiæ, as results of syphilitic iritis, were seen in males only. They existed in right eye in 2 cases, in the left eye in 3, and in both eyes in 1 case; total, 6. Posterior synechiæ, as results of non-syphilitic iritis were present in males in the right eye only in 15 cases, in the left only in 8 cases, and in both eyes in 15; total, 38. They were present in females in the right eye only in 12 cases, in the left eye only in 10, and in both in 18; total, 40; a total for both sexes of 78. Anterior synechiæ in males were present in the right eye only in 3 cases, in the left eye only in 1 case, and in both eyes in 1 case; total, 5. They were present in females in the right eye alone in 3 cases, and in the left alone in 1 case; total 4; a total for both sexes of 9. Serous iritis in males existed in the left eye alone in 2 cases, and in both eyes in 1 case; total, 3. In females in the right eye only in 1 case, in the left eye only in 2 cases, and in both eyes in 4 cases; total, 7; a total for both sexes of 10. The differential diagnosis between syphilitic and non-syphilitic iritis is easy only to the inexperienced, and, in relation to a large proportion of cases, becomes more and more difficult as experience increases. It is for this reason that I have stated the relative proportion of each variety in a somewhat guarded manner. Fortunately, however, the diagnosis *quâ* iritis, is not of great importance, and need exercise little, if any, influence on treatment. It is of the highest importance that the surgeon should discover whether his patient is the subject of congenital syphilis, and that he should treat him for it when it exists. Whether it be syphilitic or not, unless the pupil should yield to complete dilitation within twenty-four hours, the only trustworthy remedy is mercury, which, in severe cases, should always be given by inunction. There can be no shadow of an excuse for the practitioner who, under the impression that a given instance is not syphilitic, neglects the employment of the only means by which recovery, in the vast majority of cases, can be fully insured.—*British Medical Jonrnal*, April 29, 1893.

The Etiology of Membranous Rhinitis.—DR. C. A. ABBOTT says that the disease rhinitis fibrinosa, commonly known as membranous rhinitis, has recently been studied by bacteriologists, who have found that the diphtheria bacilli can often be isolated from the membranes. This fact calls for modification in the care of these cases, which have hitherto generally been considered non-communicable. He believes the treatment which is profitably employed in pharyngeal and laryngeal diphtheria is often used in these cases with benefit. Patients suffering from this disease should be isolated from healthy individuals. These cases rarely present constitutional symptoms, and their importance is therefore usually overlooked.—*The Medical News*, May 13, 1893.

DERMATOLOGY, SYPHILIS AND VENEREAL DISEASES.

By G. L. SIMMONS, JR., M. D., Sacramento, Cal.

Pigeon Skin Grafting.—DR. N. B. ALDRICH, of Fall River, Mass., reports success in grafting pigeon skin on human tissues. He says: The Thiersch method of grafting has one drawback, or at least one feature that makes it appear quite like an operation to the patient and his friends; that is, the giving of an anesthetic in order to obtain the grafts. His method of procedure is as follows: Having killed two squabs that were about half grown, he immerses them in warm boracic acid solution and quickly plucks the feathers—then immersing them in a clean warm boracic acid solution, scrubs them. The next step is to skin them; removing large pieces at a time, which are immediately placed in sterilized water. The granulations having been thoroughly cleansed with boracic acid solution, and then with warm sterilized water, the grafts are placed upon the surface. Over the grafts gutta percha tissue is placed and then warm compresses wrung out in warm boracic acid solution; over these a layer of dry cotton and then the bandage. In former operations, the pus and liquified grafts had floated many good grafts and prevented their taking. He then concluded to change the dressings earlier, and about forty hours after the operation, the dressings were removed; the pus and melted pigeon skin mopped away with wet compresses, the grafts that were not melted were left in place, and over the surface was applied plain gauze with a layer of resin ointment spread on it; over this borated cotton and then the bandage. Each forty-eight hours it was dressed in the same way, and later with boracic vaseline or resin ointment.—*Boston Medical and Surgical Journal*, April 6, 1893.

Treatment of Gonorrhea by Zinc Chloride Injections.—DR. FRANK GLENN, of Nashville, makes a further report of 24 cases of gonorrhea treated by chloride and iodide of zinc injections (one-half grain chloride and one grain iodide to the ounce of water). The average duration of treatment was sixteen and seven-twenty-fourths days. If allowed to exclude three cases of a very obstinate nature, the average time would be reduced to eleven and seventeen-twentieth days. The injections are made in the ordinary way. Should the case prove particularly obstinate, the urethra should be thoroughly irrigated with hot water, and then with the zinc injection once in twenty-four hours.—*Journal Cutaneous and Genito-Urinary Diseases*, April, 1893.

Chancre of the Tonsil, with an Analysis of Fifteen Cases.—DR. DUNCAN BULKELEY, in a paper on this subject, says: The tonsils are the seat of chancre much more frequently than was generally supposed, and Prof. Babcock had informed him that in Norway chancres occur oftener in this location than in any other, after the genitals. This was not due to the practice of bestiality among the people, but apparently to the common habit there, for the various members of the families to use the same materials in eating and drinking. In Dr. Bulkeley's practice chancre of the tonsils constituted 14 per cent. of all his cases of extragenital chancres. One very important point about chancre of the tonsil was that it is so apt to escape attention, and in almost all the cases he had met with, the affection was never suspected until he directed attention to it. In three of his cases the chancre was due to bestial practices, but in all the others was innocently acquired. In eight, the patients were males, and in seven, females. The right tonsil seemed to be more liable to be affected than the left; but in three instances both tonsils were the seat of chancre. The longest period after inception of the disease, was nine months, but in all his cases the diagnosis was absolute. Syphilis of the tonsil generally ran a long and well marked course. All cases require a most active and systematic and prolonged treatment.—*Boston Medical and Surgical Journal*, April 6, 1893.

Blood Changes in Syphilis.—KOURIED, of Vienna (*Journ. of Cutan. and Genito-Urin. Dis.*, December, 1892), is of the opinion that previous works on blood changes in syphilis lack scientific basis. Examinations have recently been made of the blood in the first stage of the disease, in the secondary period, during the course of treatment, and in untreated subjects. The proportion of hemaglobin, one of the principal elements of the blood, is of great importance. From the very beginning of the disease, from the third to the seventh week, it is found diminished in the proportion of 20 per cent. Under treatment, the proportion of hemaglobin increases, but very slowly regains its normal color. in some cases of mild syphilis untreated, the hemaglobin acts in same manner—the proportions increasing with the disappearance of the florid symptoms. In tertiary syphilis, symptoms of grave alteration in the blood are noticed. While the number of leucocytes is so variable that no definite conclusion can be drawn, the morphological changes are very noticeable. We may conclude from the observations that syphilis is a disease of the blood, and thus the marked anemia often caused by the disease may be explained. Syphilis should be kept in mind as a possible etiological factor in such diseases as pernicious anemia and tabes dorsalis.—*Am. Jour. of Med. Sciences*, May, 1893.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M. A., M. B., C. M., Professor of Clinical Medicine, University of California, San Francisco.

The Serotherapeutics of Pneumonia.—H. AUDEOUD writes that the doctrine of immunisation has been extended and applied to fibrinous pneumonia. Just as tetanus has been prevented and even cured in animals by injections of the serum of animals vaccinated against this disease—this process forming the basis of serotherapeutics—so it is possible to confer on rabbits immunity to the diplococcus of pneumonia, and to cure by means of the blood and the organic secretions of vaccinated animals, other rabbits infected with the pneumococcus and fibrinous pneumonia. M. M. Klemperer, having first ascertained by experiments on themselves, that the normal individual can tolerate with impunity and without local or general action, injections of serum of animals rendered refractory to the diplococcus, afterwards gave injections of from 4 to 6 c. c. of serum to six pneumonia patients. In every case they obtained, after 6 to 11 hours, a considerable fall of temperature, with slowing of the pulse and respirations; twice the temperature did not rise again. In ten other cases the results were excellent. Foà and Scaria have also hastened the crisis in four pneumonia patients out of ten injected subcutaneously with the blood serum of immunized animals. The quantity of liquid employed was 5 to 7 c. c., injected under the skin of the back. Janson has also applied the treatment in ten cases of pneumenia; five times the injection was followed by a short delay of the crisis; three times a temporary fall of temperature took place; once it produced improvement, the patient, however, dying later; once the result was *nil.* Audeoud prefers to make the injections into the subcutaneous cellular tissue of the thigh in preference to intravenous injection, for fear of accidental clotting; the syringe is sterilized and warmed, and the part thoroughly cleansed before puncturing it. In all these attempts the object sought is the anticipated production of the crisis which ought to terminate the disease. Netter considers the crisis to be due to a rapid and very marked attenuation of the pneumococci. Daily cultures and repeated inoculations with the pulmonary secretion or saliva of pneumonia patient, have given to Patella and Netter positive results during the time of the disease, and negative after the crisis. It is to this remarkable change in the virulence of the pneumococcus that Netter attributes the cure of pneumonia. By the accumulation of their products of secretion, the soil in which the microbes develop is often in time modified; they give rise at first to a pneumotoxine, which can be isolated, and later to the presence of another substance—antipneumotoxine—which has the power of neutralizing pneumotoxine. Thus the blood of an immunized animal contains the antipneumotoxine, and it is through it that the cure of the pneumococcus poison is brought about. In the blood serum of patients with fibrinous pneumonia one finds both pneumotoxine and antipneumotoxine, the former especially during the febrile stage of the illness, the latter after the crisis; but up to that period of the disease it has been forming and accumulating. Normal blood has been shown experimentally to have no effect when injected in equal quantity into a pneumonia patient. This treatment is most serviceable in grave cases where the organism is on the point of succumbing to the struggle, and when it needs to be sustained by every possible means.—*British Medical Journal*, March 11, 1893.

The Serum Cure of Tetanus.—BEHRING showed that the amount of the preventive serum must be proportionate to the weight of the animal. Thus the larger animals—horse, etc.—have to be used to get the required amount. With the increased degree of immunity which can now be induced in the horse, this immunity against the minimum fatal dose of tetanus bacilli now stands at 1 in 5 millions. If eure is to be effected, much larger doses are required than for protective purposes. Rotter records a case of tetanus in a man aged 25 years. Stiffness in the corresponding arm was noticed on the eighth day, trismers on the fifteenth, rigidity of the muscles of the back and abdomen on the sixteenth, and of the legs on the eighteenth day after a wound in the hand. On the fourteenth day of the disease the treatment with serum was begun, the patient receiving 66g., 50g., 45g., 50g., 50g., respectively, of Behring's serum, on five successive days. Thus a total of more than 250g. was injected, at least without any bad result. The prognosis of tetanus depends on the shortness of the incubation period and the rapidity in the development of the symptoms. In the above named case the symptoms developed gradually, hence the cure cannot be looked upon as conclusive, since the patient might have recovered without the serum treatment.—*British Medical Journal*, March 4, 1893.

Chloralose: A New Hypnotic.—HANRIOT and C. RICHET recently reported to the Académie des Sciences, the results of a research on the physiological and therapeutic action of a new substance, which they call "chloralose" (*Sem. Méd.*, Jan. 11, 1893). This is a crystalized body, formed by the reaction of anhydrous chloral and glycose on each other, with elimination of water. Chloralose has a bitter taste, and is fairly soluble in hot water, but in cold water only in the proportion of 6 grammes to a litre. In a dose of 60 centigrammes per kilo., of body weight it is toxic to the dog, but in much weaker doses, for example, 2 centigrammes per kilo., it produces very marked hypnotic effects. It is consequently more active than chloral. It has an excitant action on the medulla, the reflex movements being considerably exaggerated. Its physiological action may therefore be summed up in the statement that it has a hypnotic effect on the encephalon and an excitant effect on the medulla. By experiments made on themselves the authors ascertained that doses of 50 centigrammes, and even 1 gramme could be given to man. These, however, must be considered heroic doses, and a dose of 20 or 40 centigrammes is sufficient to induce dreamless, quiet sleep, without any sense of fatigue, headache, or dyspepsia on waking. In certain cases, patients unable to tolerate chloral or morphine, have obtained refreshing sleep with the help of chloralose.—*British Medical Journal*, January 28, 1893.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M. D., Demonstrator of Pathology, and Adjunct to the Chair of Clinical Medicine, Cooper Medical College, San Francisco, Cal.

Physiological Albuminuria.—DR. HENRY B. MILLARD does not coincide with GERMAIN SÉE, in the belief that normal albuminuria exists. If renal albuminuria were normal, it would be more frequent. He examined specimens of urine under varied conditions, in which the microscope showed no cystitis, nor any epithelia, nor pus corpuscles, without finding the slightest trace of albumin. Unless the microscope is resorted to in determining whether the slightest affection of the mucous membrane exists, the observer is not justified in stating that the albuminuria is of renal origin. The fact is, that there are numerous substances mistaken for renal albumin. The dissolved epithelia from the uterus, vagina, and bladder, the liquor puris, leucocytes, pus, dissolved or partially disintegrated pus corpuscles, and the urine of persons with even a mild catarrh of the bladder, will give a reaction with delicate tests for albumin. Then, again, mucus in the urine, as well as certain protein substances are often mistaken for albumin. It is extremely difficult at times to differentiate mucin from serum albumin. Mucin will give a reaction with nitric acid, picric acid, and Tanret's reagent. Secretions from the bronchial, pharyngeal, or nasal mucous membrane, not purulent, but as they may occur in any ordinary cold, macerated for twenty-four hours in distilled water, heated not to the boiling point, and filtered, will give a reaction with all the above tests. He believes that it is the presence of this element, mucin, which constitutes the so-called "physiological albuminuria."—*New York Medical Journal.*

Carcinoma and its Treatment.—A. ADAM RIEWICZ opposes the theory of Cohnheim, which supposed that carcinomata developed from embryonic epithelial cells. He negatives a pasasitic origin. The author favors the infectious theory of carcinoma, although no specific carcinomatous parasites have ever been demonstrated. He has, however, succeeded in recognizing the tissue products of carcinomata, and studied the latter with reference to their toxicity. The investigations show, in brief, that in carcinomata poisons are produced which show nearly the same characteristics as those of microbian origin. The poison is called *cancroin*. A 1 per cent. solution of cancroin injected into the brain of a rabbit will destroy the animal within 24 hours; and the brain presents no evidence of its action. Similar solutions made from sarcomata and other growths are without action on the animal. The negative results obtained by injections of tumor solutions other than carcinomata, enable the author to conclude that the reaction in carcinomata is characteristic, and is of the greatest value in determining the carcinomatous nature of a new growth. He next sought to obtain some substance which was similar in action to cancroin. This he found in cadaveric poison. Inoculations with the tissues of fresh cadavers produced the same results as with the cancrous substance. From the cadaver two substances were extracted, cholin and neurin. The latter was selected for purposes of therapeutical experiment, owing to its identity with cancroin. After using neurin in a case of epithelioma of the lower lip, he concluded that it had a specific action on the cancer and its metastases, that it produces necrosis of the carcinomatous elements, with or without inflammation, and that it possesses nearly the same physiological action as cancroin. In his treatment of carcinomata, he employs 25 per cent. watery solutions of neurin, neutralized with citric acid, to which is added phenol; the whole is then diluted with double its volume of water. This solution is also called cancroin by the author. The solution was invariably used hypodermically in 25 cases. The action of cancroin is symptomatic and specific. The symptomatic action refers to the analgesic and deodorizing effects, and the specific action to death of the new growth. He believes that in cancroin he has discovered a substance which enables us to treat carcinomata in a rational manner.—*Wiener med. Presse.*

The Kidneys in Syphilis.—DR. I. JUSTUS differentiates four distinct affections of the kidney of luetic origin. Among these forms, the following are characteristic: Gumma with diffuse hyperplasia of the interstitial tissue and amyloid with patches of fatty degeneration. The other forms can only be regarded as syphilitic, when other undoubted syphilitic lesions are found in the organism. In 21 autopsies on cases of syphilis, syphilitic nephritis was present 10 times, amyloid kidney 4 times, contracted kidney 4 times, and mixed forms 3 times. Dr. Justus examined 250 syphilitic patients with a view of determining three points: (1) If the renal affection was of syphilitic origin. (2) If it pursued a course parallel with other manifestations. (3) If the renal affection yielded to specific treatment. The renal affections must be divided into early and late forms. In three patients, who had just entered the hospital, albuminuria was found, which disappeared during the antisyphilitic treatment in two of the cases; one of the cases showed no reaction to the specific treatment, which fact led this observer to the belief, that the albuminuria was not due to syphilitic nephritis. Of the 250 cases, 22 developed albuminuria, during their stay in hospital; of these, 17 had the early symptoms of syphilis. The disappearance of albumin in the urine was coincident with the disappearance of other syphilitic manifestations, and in only one case were the renal symptoms intensified, notwithstanding the evanescence of other signs. This case, according to the author, may have been a toxic nephritis due to the use of mercury.—*Weiner med. Presse.*

Precision in the Treatment of Chronic Diseases.—DR. SIMON BARUCH emphasizes the importance of greater precision in our dietetic prescriptions, a precision at least approximating that exercised in the administration of medicinal agents. Physiclans are too lax as a rule in the prescription of diet. Too much is left to the caprice of the patient or the sympathy of the attendants. If the same methodical and precise adaptation of remedies practised in acute diseases were adopted in the management of chronic disease, the physician would not so frequently be compelled to acknowledge his inability to stem their destructive advance. Nothnagel and Osler have recently shown that strict precision in our prescription of remedial measures, especially of those most valuable non-medicinal agencies, are coming to the front as the chief remedies. While there is no lack of insistance upon the systematic administration of medicines, while the regulation teaspoon three times a day, or powder every three hours, is swallowed with punctuality, the patient suffering from chronic ailments is allowed to drift along as best he may, taking his exercise, his diet, his airing, his rest, his bath, as it pleases his sweet will or suits his personal convenience. Milk does not agree with one, he will say, because it makes him "bilious." The physician, instead of placing the patient under strict surveillance for days or weeks, and fairly trying milk in its various forms, of various temperatures and quantities, and at various intervals, will, as a rule, stop the milk at once on this simple statement. The writer cites the case of a woman who had been emaciating for several years, having lost during that period 40 pounds. She continued in pursuit of her duties and pleasures, although she suffered frequently from more or less acute epegastric pains and occasional jaundice. An eminent consultant had told her he could find nothing abnormal in her case. When it was suggested that she probably suffered from a gastric ulcer, and a milk and lime water diet was advised, she claimed to have received no benefit from a previous administration of milk, which was followed by jaundice. She was with difficulty persuaded to go to bed and adopt the methodical dietetic treatment suggested. From the taking of the first four ounces of milk and lime water, her pains ceased. The quantity of milk was gradually increased, until at the time of writing she took six quarts of milk and one quart of lime water daily. This case illustrates that in the simple, but systematic, precise treatment of chronic disease, lies an element of success which the physician does not utilize with sufficient frequency. Dr. Mitchell has won the admiration of the profession by his insistance upon entire withdrawal from the family and the enforcement of regular, exact dietetic rules, from which there is no appeal, because the patient's environment admits of none. There are many diseases which now baffle our best directed efforts, simply because they are not subject to methodical treatment.—*Dietetic and Hygienic Gazette*, February, 1893.

The Treatment of Dyspepsia Due to Hyperacidity.—In a paper read before the Société de Therapeutique, BARDET does not consider the antiseptic medication of this form of dyspepsia as sufficient; the treatment should be amplified by a vegetable diet, eggs and milk. In the discussion, HUCHARD observed that in cases of hyperacidity, vegetables were undigested after two hours; whereas, meat was thoroughly peptonized in this time. He recommends an exclusive meat diet. He advocates the administration of large doses of the alkalies, and has never observed anemia following their use. BOVET, in speaking of the cause of hyperacid dyspepsia, referred to two opposing theories of the production of hydrochloric acid. German chemists believe that hydrochloric acid is already present in certain cells of the gastric glands, whereas others contend that it exists in the stomach in *status nascendi*. According to the theory of the latter, the blood is saturated with mineral chlorides, especially chloride of calcium, which are broken up in the glandular cells. The protoplasm of these cells contains phophorus, which combines with the calcium and allows the chlorine, set free, to form hydrochloric acid. This speaker agreed with Bardet in recommending a vegetable diet. Huchard referred to the following indications necessary in the treatment of these cases: (1) Preventing gastric irritation at the time of digestion. (2) Diminishing the acidity of the gastric juice and inhibiting its continuous flow. (3) Preventive treatment of complications. The first indication is fulfilled by a mixed introgenous diet. He employs chiefly chiefly milk and meat, the latter freed from comective tissue. The hyperacidity is met by alkalies in large doses. The following is of value:

℞.—Natrii bicarb.......................... gm. 50.0
Cret. prep.................................. 10.0—M.

Div. in chart, No. XXX.

S.—One powder every hour after each meal for four hours.

To overcome constipation he uses magnesium.—*Wiener Medizin Presse*, January 1, 1893.

Habitual Constipation and Its Treatment by Large Enemata of Oil.—KUSSMAUL first employed enemata of oil in chronic constipation, a method which, in consequence of its excellent results, is deserving of greater recognition. Fleiner, of Heidelburg, divides chronic constipation into two kinds: (1) Atonic constipation. (2) Spasmodic constipation. The first is produced in consequence of paresis of intestinal peristalsis. It leads to the accumulation of gases and fecal matter in certain parts of the intestinal tract, thus producing marked distension of the parts. In the treatment of these cases, simple dietetic measures must be practiced: the ingestion of certain fruits, honey, bran, bread, etc. usually suffices. At other times, it is necessary to have recourse to such laxatives as rhubarb, manna, tamarind, cascara, and aloes. In these cases lavements of water and faradization and massage of the abdominal muscles may be employed with advantage. Spasmodic constipation is observed in neurasthenic subjects and is produced by a spasmodic contraction of parts of the intestines. In some of the subjects the constipation is produced by spasmodic contraction of the sphincter ani even in the absence of an anal fissure. Characteristic of this form of constipation is the character of the excrement which is broken up in small pieces, or, if the fecal mass is homogenous, it is voided in elongated pieces not exceeding in diameter the finger or a crayon. The distinction between the two forms of constipation is very important. The measures indicated in atonic constipation are contra-indicated in the spasmodic form, as they augment the intestinal spasm. In spasmodic constipation, belladonna and lavements are sometimes of temporary value. Enemata of oil are most efficacious in overcoming even the most rebellious cases of spasmodic constipation; they exert a purgative and at the same time an anti-spasmodic action on the intestines. The enema is given as follows: the patient is put in the dorsal position and an olive pointed canula connected with a douche is carefully introduced into the rectum, from 400 to 500 grammes of oil are allowed to flow slowly into the intestines. The time consumed in the introduction of this quantity of oil is from 15 to 20 minutes. This is retained until the patient can no longer resist his inclination to evacuate. If pure olive oil is used, no colicky pains attend or follow the enema. The enemata are given daily until the intestines are thoroughly emptied: which is generally the case after 3 or 4 lavements. In inflammatory lesions of the colon, Fleiner adds to the oil enough salicylic acid to make a two per cent. solution.—*Sémaine Médicale*, January 25, 1893.

Neglect of the Early Diagnosis and Treatment of Pulmonary Tuberculosis.—DR. S. EDWIN SOLLY has studied 100 cases of pulmonary tuberculosis, with the view of determining how far the early recognition of the disease influences the results of treatment. The cases are divided into two classes. The first class includes those in whom the disease was diagnosed and treated as soon as the symptoms, as described in the patient's history, showed it sufficiently developed to be recognized by any ordinary, well-educated physician. By treatment, as applied to this class, is meant any measures hygienic, therapeutic, or climatic, that were seriously used. The second class included those cases in whom the disease was not diagnosed. Diagnosis and treatment were delayed in 52 per cent., while in 48 per cent. the disease was promptly recognized and treated. Of the 100 cases, 37 were in the first stage; 28 in the second—that is, softening had commenced; and 35 in the third—that is, when cavities could be diagnosed. The proportion of cures among the cases in the first stage, treated at high altitudes such as Colorado and the Swiss Alps, is 62 per cent., while in the second and third stages, taken together, the average is only 15 per cent. These figures show how greatly the chances of recovery have been lessened by the delay. There was a family predisposition to tuberculosis in 50 per cent. of the cases. The interesting fact has been noted that the cases hereditarily predisposed run a more chronic course than the non-hereditary cases, which he explains by the theory that the family predisposition acts like vaccination or inoculation, in granting a modified protection, so that the disease is slower to advance. He also noted slightly better results among the hereditary cases. The experiments of Hericourt show that inoculations upon dogs with tubercle confer more or less immunity. Family predisposition to tuberculosis means one of two things, or perhaps both: (1) The direct transmission of tubercle bacilli through the placenta, or the milk; (2) the inheritance of a physique favorable to the reception and the growth of the bacilli.—*Medical News*, February 4, 1893.

Treatment of Pulmonary Phthisis.—DR. M. BOULAY passes in review all the substances composing the pharmaceutical arsenal which have been successively employed in this disease. Under curative treatment, he makes a division of the remedies employed into: inefficacious or dangerous medication and medication possessed of some value. The first division comprises substances known as parasiticides, which are supposed to possess a specific action. The recommendation to allow afflicted patients to respire the air surcharged with *ammonial vapors*, is faulty. Later, the recommendation to allow patients to inhale *putrescent vapors*, based on the experiments of Cantani, who maintained that the bacterium termo was inimical to the bacillus tuberculosis, was likewise shown to be incorrect. The inhalation of *hot air*, while theoretically reasonable, is practically useless. Inhalation of *compressed or rarified air* is not curative, and incites haemoptysis. The relief obtained in the asthmatic attacks of phthisical patients is due to the breaking of the pleural adhesions. Inhalations of *oxygen* and *ozonized air* are of no value, and the latter is dangerous, owing to its destructive action on the haemoglobin. Similar disposition is made of inhalations of *chlorine* and *chloroform*. The employment of *sulphuric* and *fluoric acids* was suggested by the fact that laborers in the factories where these acids are used, never have tuberculosis. Later, *sulphuretted hydrogen* was used by inhalation, but chiefly as gaseous lavements. The theory of action was supposed to be this: that in the elimination of the gas by the lungs, it acted as a parasiticide. At the time of using this gas, many attributed its effects to carbonic acid; in fact, the results obtained were similar to those when sulphuretted hydrogen was employed. Later, it was suggested to inhale the vapor of *picric* *acid* solution in a state of ebullition; but this, as well as the inhalation of *osmic acid* was discontinued in a short time. *Boric acid*, in consequence of its relative innocuousness was used in large doses, but its ingestion was without influence on the pulmonary lesions, and only aggravated any dyspeptic trouble which might be present. Similar results attended its use by intra pulmonary injections and inhalations. Vapors of *iodine*, *tincture of iodine*, and *iodide of potassium* have been successively employed. The latter drug liquefies the secretions and promotes the expulsion of the bacilli, but it is difficult to manage, and often provokes formidable haemoptysis. *Iodoform* is of some value in diminishing the fever, but it disturbs digestion, and has a feeble action on tubercle bacilli, as culture experiments have shown. Among the metallic substances, may be mentioned: *iodide of iron*, *acetate of alumnium*, *chloride of gold*, and *nitrate of silver*. *Mercury*, by ingestion, inhalation, friction, hypodermatic and intra pulmonary injections is without obvious results. *Aniline oil*, and the *aniline colors*, are virulent in their action. The following have likewise been used without result: *naphthol*, *phenic acid*, *Eucalyptol*, *camphor*, *menthol*, *thymol*, and *aristol*. The most celebrated treatment is that of Koch, by means of lymph of indefinite constitution and known as *tuberculine*. Koch supposed that tuberculine, injected under the skin, would produce a necrosis of the tissues invaded by the bacilli, and create in their environment a refractory barrier to their further development; and when the mortified tissues are cast off, cure is obtained. Experience has disproved this hypothesis. Tuberculine is a dangerous substance, and often produces a tableau of symptoms analogous to acute miliary tuberculosis. All attempts to eliminate the toxic ingredients of tuberculine, whether by alcohol (Koch), dialysis (Hunter), by benzine and chloroform (Klebs), have been in vain. The method proposed in 1891, by Liebreich, is founded on the microbicidal power of serum, and the property possessed by *cantharidate of potash*, of provoking a serous transudation from the capillaries of the lungs and kidneys. This author injected cantharidate of potash in daily doses of $\frac{1}{10}$ to $\frac{2}{10}$ of a milligam. In man it provokes, even in such small doses, cystitis and hematuria, and is, therefore, justly abandoned. Since many years, researches have been instituted for the purpose of determining whether immunity can be conferred on phthisical individuals by various methods of *vaccination*. The idea of inhibiting tubercular processes by other diseases, is very old. It has been remarked that there is a certain antagonism between tuberculosis and other diseases. That has been observed with reference to hysteria, alcoholism, rheumatism, and suturnism. It has further been observed that typhoid fever, variola, and malaria, have restrained the evolution of tuberculosis. Many of these observations are erroneous. Many observations, however, seem to demonstrate beyond question that erysipelas will stay or favorably influence pulmonary tuberculosis, and it has been proposed to inoculate phthisical individuals with the *streptococci* of *erysipelas*. Experimenters have attempted to emulate *Pasteurian vaccination*, i. e., to inoculate phthisical patients with cultures of tubercle bacilli of progressive virulence. Experiments with this object in view, conducted by MM. Graucher and H. Martin in 1890, have been very encouraging; but as they experimented with aviary tuberculosis, which is not identical with human tuberculosis, the results of their experiments are questionable. MM. Hericourt and Richet first conceived the idea of treating tuberculosis of rabbits by inoculating them with *blood* or *serum* of some animal refractory to tuberculosis, such as the dog. MM. Picq and Bertin, later on, used the blood of the goat The dog and goat do not possess complete immunity against tuberculosis. Perhaps by employing the blood serum of an animal absolutely refractory to tuberculosis, man may be rendered immune. The treatment of *Brown-Sequard*, by means of subcutaneous injections of the aqueous extracts of testicles, has been applied in phthisis, not with the hope of cure, but for the purpose of controlling the debilitation. *Resection* of the apices of the lung for the cure of phthisis, is a hazardous operation. *Intra pulmonary injections* of chloride of zinc may be of value in circumscribed tuberculosis; while alcohol, used in the same manner, may cause a proliferation of the connective tissue elements, and thus limit the tubercular process. The many methods of treatment just passed in review, have had their hour of celebrity, and surprising to say, their hour of success. *Medication possessed of some value.*—In this category, the agents recommended have their indications and contra indications. *Arsenic* has been looked upon as an excitant of nutrition, and as a parasiticide. It is poorly tolerated by patients with gastric and intestinal affections, in which cases it may be used hypodermically. The doses must be gradually increased, and long continued, in order to secure a mithridatic effect in the tubercular process. The efficacy of certain mineral waters is owing to arsenic as an ingredient. Other waters owe their efficacy to the presence of sodium chloride and phosphate of lime, both of which substances are expelled in large qnantities in the urine and sputa of consumptives. *Tannin* has been used with remarkable results by MM. Raymond and Arthaud. They found that tuberculosis in rabbits was inhibited by this remedy. In man, tannin in daily doses of from two to five grains, will produce an amelioration of the general symptoms and arrest the evolution of the malady. Under its influence, the circumscribed tubercular process is brought to cicatrization. These good effects have been confirmed by others. Its mode of action is problematic. *Greosote* is the most universally employed agent in phthisis. All the opinions relative to the favorable action of creosote are mere theories. It stimulates the appetite and arrests the bronchial secretions. It is certainly not a specific. Many cures reported from its use have been temporary. Large doses of creosote are not well borne; in fact, large doses are unnecessary, the same results being attained by small doses. M. Tapret has employed creosote with success by inhalation, in a cabinet under increased pressure. The effects produced by intra tracheal and pulmonary injections of creosote are negative. Creosote may likewise be employed by hypodermic injections, inunctions in suppositories, and finally by lavements. *Guiacol* has been employed as a substitute for creosote, with results similar to that of the latter.—*Gazette des Hopitaux*, March 11, 1893.

The Treatment of Ascites by Faradization of the Abdomen.—ROBERTS BARTHOLOW has observed two cases of ascites which yielded to this method of treatment. Not all cases of ascites are suitable for the applications of this remedy which causes violent concussion of the abdominal contents. General peritonitis and acute or sub-acute peritonitis, when general soreness or tenderness accompany the effusion, are unfavorable conditions for faradization. The ideal case of ascites for electrical treatment is that of complete distention of the abdomen caused by partal obstruction of a remediable character. Usually, however, the case is one of cirrhosis due to the alcohol habit. In such an example the ultimate result depends on two factors: on the amount of hepatic substance remaining in a condition to functionate; on the ability of the patient to free himself from the alcohol habit. Ascites due to cirrhosis has been successfully treated by Salfanelli, the original proposer of the faradic method, and by Alvarenga, who appears to have been the second advocate of this plan. Ascites of chronic nephritis and mitral insufficiency have been reported as cured by Muret and Glax, respectively. Either of two plans may be pursued in applying the faradic current; one electrode placed on the upper dorsal vertebræ, and the other moved over the abdominal wall, so that each group of muscles is acted on, or both electrodes held in one hand, according to the method of Duchenne, and each group of muscles made to contract several times before passing on to the next. Fatigue of the muscles should be avoided, for this indicates that the applications have been too protracted or too strong. The *séances* should not exceed fifteen minutes in duration, and they need not be more frequent than once a day. In some of the reported cases, the faradic applications have been made two or three times a day, and with increased rate of improvement. The improvement noted begins immediately, and an actual diminution in the girth of the abdomen is observed from a single application. The explanations of the curative action of faradism in cases of ascites differ somewhat. Erb explains the effects by reflex and catalytic actions. Muret and Glax attribute the effect to the strongly contracting muscles acting on the contents of the cavity, but especially to the impression on the peripheral nerves reflected over the renal nervous apparatus, and to the reflex action proceeding through the medulla oblongata to the vaso motor system, thus affecting the vascular tension. The observations of Eltz, Riebmayer and Nothnagel show that abdominal massage increases the absorption of intraperitoneal and intestinal exudates and the flow of urine. The effects of abdominal massage on the renal secretions show that increased diuresis is a constant phenomenon. These facts indicate that the effects of faradism, in causing the absorption of the fluid in ascites are more reflex than mechanical—more the increased action of the absorbent vessels and of the kidneys than the mechanical impact of the contracting muscles.—*Medical News*, February 25, 1893.

[Acites, in the majority of instances, is an expression of obstruction in the portal veins and its tributaries, and its disappearance is incited by removal of the cause, or the development of a compensatory circulation. The latter cause usually prevails, and the veins implicated are accessible to manipulation by faradism and massage. Inasmuch as muscular contraction is one of the factors in facilitating the return of the blood in the veins to the heart, it is evident that faradism and massage of the abdominal muscles exert much of their beneficial action in this way. Then, again, a mechanical factor in promoting resorption of the transudate does not admit of negation. Porosity is inherent in all tissues, and the density of a tissue bears an inverse ratio to its porosity. The peritoneum is a very porous tissue, in fact, it is an immense lymph sac amply provided with stomata, which does not fail to resorb fluid under conditions conducing to increased abdominal pressure. The recommendation to apply a bandage to prevent a reaccumulation of ascitic fluid after paracentesis, is inadequate as practised ordinarily. Better results can be achieved by the application of a rubber bandage, tightened systematically from day to day. Similarly the application of a rubber bandage may accomplish the same object in peritoneal transudates as does faradization of the abdominal parietes.—A. A.]

Chronic Muscular Rheumatism.—DR. LEO. EWER, after reviewing the etiology of this affection from the time of Hippocrates, refers to certain facts hitherto undescribed. Muscular rheumatism of any duration is attended by a chronic inflammation of the muscular fibres or perimysium externum, which results in the formation of small nodules which can be distinctly felt. The nodules develop slowly at the expense of the muscular substance, and may eventually reach the size of a walnut or apple. These nodules, or connective tissue tumors, are hygroscopic, and imbibing moisture from the atmosphere or blood, they swell, pressing upon the sensory muscular filaments, causing pain. The nodules, called by the author, "vital barometers," swell periodically, thus corresponding with the intermittent pain peculiar to muscular rheumatism. Individuals suffering from this affection soon complain of diminishing muscular power, which the writer attributes to destruction of muscular fibres by pressure of the nodules. The diagnosis of chronic muscular rheumatism can only be accomplished by thorough palpation of the affected muscles and the detection of the nodules; this manipulation does not consist in merely pressing upon the muscles, but by searching them carefully when in a condition of complete relaxation. Nothing new is furnished regarding treatment. While the faradic and galvanic currents are recommended, particular stress is laid upon the employment of massage, which must be continued as long as any nodules are felt in the affected muscles.—*Berliner Klinik.*

Stomach Washing in Acute Internal Incarceration.—This method was first suggested by Kussmal, in 1882, and at that time introduced into practice. S. Pollak reports 7 cases where this method was employed, of which 5 were cured, the others dying of an intercurrent disease, notwithstanding the intestinal passage was made free. Stomach washing is indicated as follows: (1) In occlusions provoked by coprostasis, fercal and biliary calculi, ingested foreign bodies, twists and knots of the intestines. It is also employed in all cases where the localization of the site of the obstruction is impossible. (2) It is employed in all cases where, in consequence of weakness of the patient, an operation is contraindicated, in which cases it is palliative. (3) It is employed for all operative procedures in order to reduce the intra-abdominal pressure. Washing of the stomach must be continued for at least two and not longer than four days, and repeated daily from two to four times. If at the end of this time, the intestinal lumen is still impermeable, an operation is at once indicated. As adjuncts to stomach washing, high intestinal irrigations and opium per orem may bementioned. Water is used for stomach irrigation and must be continued each time until the return flow is clear.—*Wiener med. Presse*, January 29, 1893.

A New Method of Intraorganic Thoracic Auscultation.—B. W. RICHARDSON discovered, accidentally, in passing a sound through the esophagus, that when the end of the instrument was connected with a stethoscope he could hear different murmurs. He instituted a number of observations, and determined that this method of auscultation was of value in certain cases. When the sound passes through an esophageal stricture, a loud friction sound is perceived, while when it enters the stomach, a shrill sound is heard. The heart tones are distinctly heard and differentiated, although the respiratory murmurs cannot be auscultated. The murmurs were not as resonant as in ordinary auscultation. The importance of this method may be observed in thoracic aneurisms, heart failure, and in the differentation of pericardial and pleural friction murmurs. The sound used was the ordinary elastic stomach sound, with two lateral openings. The stomach sound must be shifted until it is opposite the point to be auscultated.—*Muenchener med. Wochenschrift*, December 6, 1892.

Erythromelalgia.—This affection, according to PROF. SENATOR, was described by Weir Mitchell in 1872 and 1878, and is characterized by two symptoms, viz: redness and pain in the extremities. Only twenty cases have thus far been described. Middle-aged men are usually attacked. The affection commonly begins in the feet, with severe neuralgic pains, then in the hands and arms, followed by intense redness of the affected parts, unaccompanied by fever. The suffering is intensified by everything which promotes the flow of blood to the parts; it is more frequent in summer, while in winter it is less severe and often disappears. Erythromelalgia is an erythema, provoked by active hyperemia. No other erythema begins with such severe neuralgic pains, and is of such long duration. The affection is an angio neurosis. Nothing definite is known of the prognosis and course of erythromelalgia. As faradization of the affected parts has been recommended, Senator used the faradic current in his case with good results.—*Muenchener med. Wochenschrift.*

Clinical Peptoscopy.—DR. QUINTARD determined the rapidity of digestion by inclosing iodide of potash in capsules of gutta percha, bound by threads of fibrine and noting the time when iodine could first be determined in the saliva. This method he now modifies by having the patient swallow a definite quantity of methyl-blue, inclosed in capsules of gluten. These peptoscopic capsules, when swallowed, resist the action of the gastric juice according to the quantity of hydrochloric acid in the fluid. Two hours after a meal the urine is examined every quarter of an hour until it assumes a beautiful green color. In a subject with normal digestion, the coloration occurs in about 2½ hours after ingestion of the capsule, whereas in gastric embarrassment of any kind, the coloring matter does not appear until after 5, 6, 7, and even 8 hours.—*Médicine Moderne.*

Morvan's Disease.—This affection, named after the physician who described it, is confined to a district of Brittany. It is a chronic disease characterized by neuralgic pains, cutaneous anesthesia, and painless and destructive felons. The nature of the disease is uncertain, some claiming it to be a peripheral neuritis of infectious origin, while others identify it with syringo-myelia. More recently M. ZAMBACO affirms, after a careful consideration of the subject, that Morvan's disease, confined to Brittany, is nothing else than leprosy. It is, however, not so grave, so intense, nor so acute as Oriental leprosy, and while it is more or less modified or attenuated, the principal traits of both affections are the same.—*Union Médicale.*

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M. D., Assistant Physician, State Asylum for Insane,
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Cerebral Hemorrhage.—PROF. E. MENDEL, of Berlin, has recently directed his attention to the question, why hemorrhages into the brain occur most frequently from one of the small branches of the artery of the corpus striatum, while hemorrhages from the cortical blood-vessels are less frequent. The diseased condition of the cerebral vessels leading to the formation of miliary aneurisms, which burst when the arterial tension is suddenly increased, is the cause of the hemorrhage. The aneurisms are found most frequently and in greatest number on the art. corp. striat. It would seem from the experiments of Prof. Mendel, and those of Heubner and Duret, that the arteries which supply the large ganglia and white substance are terminal arteries, while the arteries in the cortex form an extensive anastomotic plexus. This distribution

Prof. Mendel attempted to demonstrate by means of a system of rubber tubes. A tube representing the aorta and carotid is connected with a rubber balloon acting as the heart; to the tube are attached two systems of tubes corresponding with the arrangement of the cerebral vessels, one—the branches of which anastomose with each other—exemplifying the cortical vessels, the other representing the terminal arteries of the corpus striatum. Mercurial manometers were adjusted in suitable places along the tubes. If, now, the balloon be compressed, it is found that the pressure in the cortical arteries is always much less than in the carotid, while the pressure in the art. corp. striat. is only slightly less. If these conditions be transferred to man, the fact that the arteries of the large ganglia burst much more frequently than the cortical arteries is accounted for by the former not being protected by special arrangements against the effect of increased pressure like the anastomoses of the cortical vessels. The increase of pressure, which occurs so frequently in life in consequence of emotional disturbance, physical exertion, excessive use of coffee, alcohol, etc., enlarges the diameter and distends longitudinally the walls of the arteries, which are especially exposed to it. The frequent recurrence of this process leads gradually, in advanced age, to atrophy of the muscular coat and the formation of miliary aneurisms. A sudden increase of pressure ruptures the aneurism and this produces the apoplexy. Prof. Mendel explains the attack as being due to the variations in blood pressure, while the anemia in the cortical arteries accounts for the loss of consciousness and the other general symptoms. As the most rational plan of treatment during the attack, he recommends absolute bodily rest, especially the avoidance of any movement of the head, which should be kept elevated.—*Neurol. Centralblatt.*

Insanity in Early Childhood.—DR. WHARTON SINKLER reports three cases. The first occurred in a girl after an epileptic attack at the age of 3½ years. The patient died in a convulsion when she was 7 years old and had been under observation for two years. During this time she was extremely restless, never quiet, would swear and do everything bad that she could. She talked and sang a great deal and was very noisy. During the two years prior to her death she had several epileptic fits and occasional attacks of acute mania, during one of which she seized a kitten and killed it. There appeared to be no relation between the epileptic attacks and the periods of mental excitement. In the second case the insanity developed when the child was 2½ years old, immediately after a severe fright. She was unruly and excitable, could not be left alone with other little children without hurting them. She would bite and tear her clothing, was dirty in her habits and disobedient. She would repeat continually the words "baby had a book" but used no other words. After many months she improved greatly in all respects but still remained somewhat excitable and easily irritated. In the third case the existence of attacks of *petit mal* was the only discoverable cause present. The disease showed itself when the girl was 2 years and 2 months old. At first restlessness at night and causeless crying were observed. This was followed by a loss of power of articulate speech, lasting a few minutes. She became dirty in her habits, would even eat her own feces, and became very destructive, was a frequent masturbator and in her restlessness at night would frequently talk to imaginary companions.—*International Medical Magazine*, February, 1893.

Relations of Some Forms of Acute Insanity to Paranoia.—PROF. ROSENBACH considers the term "acute paranoia" preferable to the terms applied by certain authors to a similar mental condition, such as primary acute delirium, hallucinatory Verruecktheit, hallucinatory Wahnsinn, delire d'emblée and delusional stupor. The term acute paranoia was applied by Westphal to a condition the prominent symptoms of which are the sudden outbreaks of hallucinations and delusions in great variety, usually combined with motor excitement and complete confusion of ideas. The patients generally recover; otherwise they pass into a condition of mental enfeeblement without systematized delusions. On this account he objects to classifying it with chronic paranoia; he considers it a psychoneurosis, and proposes the name "folie generale." The author cites the history of seven cases, in most of which hereditary predisposition was present. Excesses of various kinds, anemia, fever, and the puerperal state figured as exciting causes. In all the cases the disease began suddenly with numerous delusions of a persecutory, hypochondriacal or melancholic character without any consistency and with complete mental confusion. Most of the cases recovered.—*Annal. med. Psych.—American Journal of Insanity.*

A Case of Ether Dipsomania.—DR. JULES CHRISTIAN reports a peculiar case of addiction to the use of ether. The habit having lasted over 16 years, brought about epileptiform convulsions, followed by death. The patient was subject to "spells," beginning with symptoms of malaise, loss of appetite, sensations of weight in the epigastrium, coated tongue, restlessness, anxiety, irritability and complaints of palpitation of the heart. He then would purchase ether, hail a "fiacre," make himself comfortable and inhale his favorite liquid. If the process was carried only to the stage of exhilaration be became gay, sang, laughed and was talkative, amusing himself as a *gamin*. If he stopped at this point he became calm after a more or less prolonged period of exhilaration. Generally, however, the inhalations were continued and the excitement became more active; he would become violent and fight with the coachman and bystanders until subdued. The habit was acquired during his service with the ambulance train in the Franco-Prussian war, and apparently no treatment save incarceration at Charenton was of value.—*Journal de Médicine de Paris—American Journal of Medical Sciences*, February, 1893.

Operations Upon Insane Women.—The results of some gynecological operations upon insane women have recently been examined by DR. ROHÉ. In an asylum containing 200 female patients he examined 35, of whom 26 were found to be suffering from some form of pelvic disease. On 18 of these latter cases he performed laparotomy and removed the ovaries, but the results obtained were not very satisfactory. Six of the 18 were cases of melancholia, 4 of mania. In these 10 cases no improvement was obtained. Three of the patients were suffering from epilepsy. Of these 1 died from septic infection; 1 is reported to be improving, though still subject to epileptic attacks, and 1, a case of hystero-epilepsy, is recorded as having been entirely cured. The remaining patients were suffering from puerperal mania; of these three are said to have recovered their reason after the operation. These results are not encouraging, and would hardly justify the performance of operations of a like nature upon women in insane asylums.—*Medical Press and Circular*, February 8, 1893.

Sulphonal Habit.—DR. GILBERT, of Baden-Baden, in a paper read before the congress of German Neurologists, reports two cases of sulphonal habit in which enforced abstinence gave rise to a series of symptoms similar to those witnessed in morphine abstinence. He also speaks of two other cases in which serious symptoms were present as the result of the continued use of the drug. All four cases showed amongst their symptoms illegibility of handwriting; the patients could not write straight, and the characters were unsteady. He draws attention to the fact that sulphonal is largely used in Germany and most other countries, and obtainable without medical prescription. In regard to the mode of administering the drug the writer recommends that it be dissolved in boiling water poured on and allowed to cool just sufficiently to be drinkable. Sleep will follow in fifteen to twenty minutes when this method is adopted.—*Lancet—Dublin Journal of Medical Science.*

The Weight of the Two Sides of the Brain.—PROF. BRAUNE, of Leipzic, has recently published the results of weighing the halves of 100 human brains. These were divided in the median line, and the cerebellum, with the medulla and pons, were cut off and bisected. The weight of the two sides of the whole encephalon were compared, as well as that of the cerebral hemispheres, and the halves of the cerebellum with the medulla and pons. It has generally been taught that the left half of the brain is heavier than the right, and that this is a physical cause of right-handedness. The results of Prof. Braune's investigations do not seem to bear this out. He found the left side of the entire brain heavier in 52 cases, and the right in 47 cases, the two sides being equal in 1 case. And he also found that if the excess of weights of the two sides be added up, the right side showed a preponderance, the difference between the two sides being in most cases so slight as not to deserve any consideration. In five cases in which the right side considerably outweighed the left, the bodies were examined for signs of left-handedness, but none were found. The left cerebral hemisphere was the heavier in 54, the right in 37 cases; while the left side of the cerebellum was the heavier in 54 and the right in 33 cases. Thus he found that the cerebral hemisphere of one side is the larger about as often as the cerebellum of the other; but the larger halves are on the same side about twice as often as on different sides.—*Boston Medical and Surgical Journal.*

Prognosis of Acute Mania.—DR. WILLERDING, in a recent article on this subject, says that about 70 per cent. of all cases of acute mania are, in his experience, cured; the disease having an average duration of several months and its course being favorably inflenced by early treatment in insane hospitals. Those cases of mania which occur as sequelæ to disease, as alcoholism or pregnancy, have a favorable prognosis both as regards duration and ultimate cure; even where there is a history of insanity, the prognosis is not necessarily unfavorable. A sudden onset of the maniacal excitement is an unfavorable symptom, except in puerperal cases or cases following traumatism of the head; in the latter instances the prognosis is favorable if the injury to the head be slight. A sudden stoppage of the maniacal excitement is sometimes indicative of recurrent mania or of an early relapse. The former has a bad prognosis as to ultimate recovery. The younger the patient the greater is the hope of recovery; in a disease of long standing the prognosis is very unfavorable. Great increase of body-weight before the beginning of the quiet stage is an unfavorable symptom.—*Boston Medical and Surgical Journal.*

Hematoma Auris in the Insane.—Dr. TISHKOFF reports ten cases of hematoma auris among patients suffering from general paralysis of the insane in which disease he finds that the hematoma differs clinically as well as pathologically from other forms of the disease. This disorder is due to exposure of the cartilage of the ear to external influences, rendering it susceptible to morbid changes. It commences with inflammation of the perichondrium, attended by the formation of new blood-vessels and followed by the absorption of the cartilage. The rupture of the newly formed blood-vessels leads to the formation of a cavity between the perichondrium and the cartilage, which increases as the flow of blood continues. This hemorrhage, under the perichondrium, gives to the hematoma its characteristic appearance. As the blood is gradually being absorbed, the walls of the cavity thicken on account of the new formation of connective tissue. The exciting cause in the insane is generally maniacal excitement; in the healthy, it is always traumatic.—*International Medical Magazine.*

FORMULÆ.

By Geo. B. Somers, M. D., San Francisco, Cal.

Urticaria in Children:

Chloral hydrate
Powdered camphor
Powdered gum arabic--āā ʒi
Simple cerate------------- ℥i—M.

Rub the first three substances together until they liquefy, then add the cerate.—*Union Médicale.*

S.—Apply to affected region at bedtime.

Cystitis in Women.—(*Journal de Med. de Paris*):

Citrate of potash--------- ℥ss
Ext. triticum repens, F.
Tinct. belladonnae---āā ℥i
Ext. buchu, F. ---------- ℥ss
Water *q. s. ad* ---------- ℥iv—M.

S.—Teaspoonful in wineglass of water three times a day.—*Medical and Surgical Reporter.*

Podophyllin.—This drug is soluble in tincture of ginger and may be prescribed as follows:

Resinæ podophyllii--------gr. ii
Tinct. zingiberis------------ ℥i

S.—Teaspoonful in a glass of sweetened water on retiring.—*Medical and Surgical Reporter.*

Burns in Children.—Wertheimer uses:

(*a*)—Lime water
Oil of sweet almonds---āā ℥iss
Thymol ---------------gr. i to ii

(*b*)—Bismuth subnitrate---------- ʒss
Boric acid ------------------ ʒi
Lanolin-------------------- ℥ii
Olive oil-------------------- ℥ss

—*Nouveaux Remédes.*

Enteric Fever.—Bartholow and Wilson recommend the following (*College and Clinical Record*):

Tinct. iodine ---------gtt ii
Ac. carbol.------------gtt i—M.

S.—To be given in a wineglassful of water every two or three hours.—*Atlanta Medical and Surgical Journal.*

Tonic in Syphilis.—Muench advises:

Hydrarg. protiod.---gr. xxiv
Ferri et quin. cit.--- ʒv
Ext. hyoscyam.------gr. xviii—M.

Make 100 pills.

S.—Three a day.—*American Practitioner and News.*

Perspiration of Feet:

(*a*) B.—Naphthol --------- 3 parts
Glycerine --------- 10 parts
Alcohol -----------100 parts

S.—To wash the feet.

(*a*) B.—Naphthol --------- 2 parts
Starch--------------180 parts

S.—To dust the feet.

Perspiration of Hands:

Boric acid------------------- ʒi
Borax
Solicylic acid------------āā ℥ss
Alcohol -------------------- ℥i

S.—To rub on the hands three times a day.—*Nouveaux Remédes.*

Palatable Castor Oil:

Castor oil----------------1 part.
Hot milk-----------------4 parts.

This mixture is limpid and children take it without any difficulty. The hot milk seems to render the action of the oil more energetic.—*Nouveaux Remédes.*

Anodyne Liniment.—(*Medical and Surgical Reporter*):

Olei erigerontis
Tinct. Opii
Spr. ammoniæ
Olei olivæ .... āā ; ℥ i—M.

Shake well before using and apply with gentle friction.— *College and Clinical Record.*

Dyspepsia.—M. JULES SIMON has found the following treatment very useful in cases of obstinate indigestion:

Tincture cascarilla
Tincture cinnamon
Tincture gentian
Tincture colombo
Tincture rhubarb ...... āā ʒ ii
Tincture nux vomica .... ʒ i

—*Medical Record.*

Cocaine in Morphine Habit.—OBERSTEINER uses cocaine internally, never hypodermically, when symptoms of abstinence are very severe:

Cocaine muriate .... gr. vii
Salicylic acid .... gr. ii
Distilled water .... ℥ iii—M.

Dose: One or two teaspoonfuls as required several times a day.—*Lancet*
—*Dublin Journal of Medical Sciences.*

Laxative.—The following mixture is cheap and convenient:

Magnesii sulph. .... ℥ i
Potassii bitart. .... ʒ i
Ferri sulph. .... gr. x—M.

S.—For a quart of water. A wineglassful before breakfast.—*College and Clinical Record.*

Aphthæ.—MONIN says: The aphthæ should be touched with a drop of ether to dissolve the pellicle which covers the vesicle. Then dress with:

Mucilage of quince ...... ʒ ii
Borate of soda .... ℈ i
Chlorate of potash ...... gr. vii

—*Union Médicale.*

Otalgia:

Camphor-chloral .... 5 parts
Glycerine .... 30 parts
Oil of sweet almonds .. 10 parts

Soak a small piece of coton in the liquid and insert in the patient's ear. —*Progrés Medical.*

Seasickness:

Bromide of potash
Chloralamide .... āā ʒ ss
Distilled water .... ℥ i—M.

S.—To prevent seasickness.—*Nouveaux Remédes.*

PUBLIC HEALTH.

By W. R. CLUNESS, M.A., M.D., San Francisco, Cal.

Mortality for April.—The deaths registered in 94 town districts of the State during the month of April, in a population of 800,116, correspond to an annual rate of 14.28 a thousand; the total mortality having been 953. 68 deaths were due to zymotic diseases, giving an annual rate of 1.008 a thousand; of these, 16 were due to diphtheria, 3 to cholera infantum, 13 to typhoid fever, 1 to diarrhea and dysentery, 6 to cerebro-spinal fever, 8 to whooping cough, 6 to croup, 5 to remittent and intermittent fevers, 10 to scarlet fever. 288 deaths resulted from diseases of the respiratory organs, giving an annual rate of 4.20 a thousand; of these, 193 were due to consumption, 70 to pneumonia, 22 to bronchitis, and 3 to pulmonary congestion; the rate being for consumption and pneumonia 2.88 and 1.04, respectively. 77 deaths resulted from diseases of the heart, 5 from alcoholism, 5 from erysipelas, 26 from cancer, and 432 from causes not given. The average annual death rate from all causes occurring in the ten largest cities and towns in the State, and representing a population of 529,500, was 13.93. The highest rate for the month, occurring in cities having a population of 10,000 or more inhabitants, was reported from San Francisco; the lowest from San Diego.

Cholera.—Insofar as the press has reported the proceedings of the Sanitary Conference, held in San Francisco on April 17th, it appears that but little attention was devoted to the medical treatment of cholera. It is probable, however, that more was said upon that important part of the subject than appears in print, and that when the transactions are published, a well-defined line of action will be indicated. Nevertheless, it will doubtless be some time before an opportunity will be afforded us of consulting the various papers read at the convention on this practical part of their work, and as inquiry has already been made upon this subject, the following brief suggestions are offered, as embracing the general line pursued and found to be most effectual by those who treated a large number of cases during the last epidemic. Generally speaking, their experience indicated the worthlessness of drugs of all kinds, excepting insofar as the hypodermic administration of morphine was concerned, to relieve excessive pain. What has been termed the expectant and symptomatic treatment, consisting in the administration of wine, anodynes, warm stupes, hot baths, hot tea and coffee, friction with enemas of tannin—one to two quarts of a 1 per cent. solution thrown high up into the bowel—appears to have been followed by the best results, especially in the milder cases, and when the crisis had passed. Calomel, and the subcutaneous injections of common salt and of camphor and morphia, appear to have given the next best results. Professor Klebs, of Zurich, Switzerland, maintains that the remedy discovered by him, and named anti-cholerine, because of its having been obtained from the culture of the cholera bacillus, has given excellent results. He claims to have cured several cases within three days, which were regarded as hopeless, the result being due to the direct action of the preparation upon the chobra vibrio. The stomach should be maintained in its normal condition of acid reaction, by the strictest observance of the ordinary laws of health, and any deviation from this condition should be immediately corrected by the administration of one or other of the mineral acids, preferably aromatic sulphuric acid. Salol is recommended as destroying the bacilli in the intestines. The intravenous injection of milk has been tried, but the practice is risky, and equally good results may be obtained by the salt solution injected subcutaneously. For the intense thirst the patients may be given ice and ice water freely.

METEOROLOGY.

Summary for April.—*Temperature.*—The normal temperature of the State for April is 58°, average 55°; departure from normal, =3°. The highest monthly mean was 80°, at Volcano Springs, in the desert regions of San Diego county; the lowest 30°, at Cisco, in the mountain regions of Placer county. The maximum was 105°, at Volcano Springs, on the 21st; minimum 10°, at Cisco, on the 7th. The greatest monthly range was 64°, at the agricultural experiment station Tulare county and Pasadena; least monthly range 19°, at Point Lobos.

Rainfall.—Normal precipitation for State 2.36 inches, average for April 1.57 inches; departure from normal, =0.79 inches. Greatest monthly precipitation, 12.12 inches, at Crescent City, Del Norte county; least monthly precipitation, nothing, at various points in Southern California.

Unusual Features.—The unusual meteorological features were the injury to crops, owing to the continuous, drying, northerly winds during the latter half of the month.—JAMES A. BARWICK, Director California Weather Service.

California—Tabular Statement for April, 1893.

STATIONS.		TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
		Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean Daily Range	No. of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn	Cal.	55.6	78.0	39.0	----	----	----	----	3.71	----	----	----	----	W.	Southern Pacific Company.
Berkeley	"	50.3	68.0	40.0	59.9	44.3	15.6	7	1.62	83.0	14	4	12	W.	Obs. University of California.
Colfax	"	47.8	75.0	32.0	----	----	----	----	1.25	----	----	----	----	N.E.	Southern Pacific Company.
Eureka	"	47.8	63.0	33.0	53.1	42.4	10.7	18	7.16	87.0	5	7	18	N.	Weather Bureau Dept. Agr.
Fresno	"	55.8	82.0	36.0	68.4	43.1	25.3	2	0.34	62.0	17	13	0	N.W.	" " "
Keeler	"	55.0	76.0	32.0	66.3	43.8	22.5	1	T.	29.0	20	3	7	N.W.	" " "
Los Angeles	"	57.8	84.0	39.0	68.7	46.9	21.8	1	0.19	71.0	19	9	2	W.	" " "
Monterey	"	48.9	70.0	38.0	----	----	----	----	1.41	----	----	----	----	S.W.	Southern Pacific Company.
Napa	"	55.0	75.0	39.0	65.4	44.6	20.8	7	1.05	71.0	15	9	6	S.W.	Station Napa Insane Asylum.
Oakland	"	54.4	71.0	44.0	62.6	45.9	16.7	6	0.98	81.0	13	11	6	N.W.	Chabot Observatory.
Paso Robles	"	56.0	81.0	40.0	----	----	----	----	1.09	----	----	----	----	N.	Southern Pacific Company.
Red Bluff	"	54.6	78.0	37.0	64.8	44.3	20.5	9	1.42	65.0	7	13	7	S.E.	Weather Bureau Dept. Agr.
Sacramento	"	55.7	77.0	38.0	65.4	46.0	19.4	4	1.08	69.0	18	7	5	S.W.	" " "
San Bernardino	"	58.8	86.0	35.0	72.8	44.8	28.0	3	0.48	65.0	18	10	2	W.	A. K. Johnson, M. D
San Diego	"	57.5	78.0	43.0	65.2	49.8	15.4	1	0.22	70.0	18	8	4	N.	Weather Bureau Dept. Agr.
San Francisco	"	52.4	72.0	40.0	57.8	47.0	10.8	7	1.03	79.4	12	13	5	S.W.	" " "
Santa Barbara	"	57.0	80.0	40.0	67.1	46.9	20.2	2	0.38	66.0	26	0	4	N.W.	Hugh D. Vail.
Santa Cruz	"	57.7	75.0	41.0	67.5	----	----	7	1.75	----	21	8	1	N.W.	W. R. Springer.
Yuma	A. T.	69.4	96.0	45.0	85.2	53.6	31.6	0	0.00	32.0	26	3	1	W.	Weather Bureau Dept. Agr.

T. means a trace of rain. Blank (----) indicates data missing.

Occidental Medical Times.

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: JUNE, 1893.

PROFESSIONAL ASSOCIATION WITH IRREGULAR PHYSICIANS.

The public has come to accept as a fact, but as an ultimate fact unexplained and inexplicable, the refusal of scientific physicians to enter into professional relations with sectarian physicians of any school whatever. While the public at large, as I have said, accepts this refusal as an ultimate fact, about which the less you inquire the more you will know, there are, besides the few who accept it understandingly and approvingly, a large number of independent spirits who consider it an evidence of narrowness quite unworthy of a learned and liberal profession, and not a few scientific physicians, who themselves have questioned its policy, its propriety, and perhaps even its justice. It may not be amiss, therefore, as briefly and as tersely as possible to state the grounds on which this refusal rests.

In the first place, scientific medicine, like every other natural science and equally with every other natural science, is based on observation, experiment, and induction. This it insists, equally with other sciences but no more than other sciences, is the only method of reaching the truth. Without this method it insists that no man can be a scientific physician, or, in other words, in any worthy sense a physician at all. But while it insists on the methods of science, it is tolerant of the widest divergence of opinion and practice. It has not assumed and does not prescribe any general law of therapeutics to which all facts must either conform or be relegated to the limbo of apocrypha. It is, therefore, broad enough for every scientific physician, of whatever belief or shade of belief.

The scientific physician insists on the methods and accepts the results of scientific investigation. With those who pursue different methods and accept different results he has no common ground. He cannot abandon his own methods, for he knows them to be approved by science in all its departments; he knows them to be the methods on which all progress is based. Those who pursue different methods are not likely to give them up, and if they should, they are in no condition either to receive or to offer a scientific opinion. Consultation, therefore, in the true sense of the word, is impossible between the scientific and the sectarian physician. By restricting professional association, scientific physicians can influence and control medical education, and elevate the standard of capacity and attainment among medical men. Instead of being extended to irregular physicians, recognition should be restricted, even in the regular profession. The resolution adopted by the State Medical Society, instructing its Board of Examiners to refuse licenses on diplomas emanating after the year 1894, from schools that do not require a thorough preliminary education and a full four years' course in medicine proper, is in the right direction. Enforced by the various State and local medical societies, such a resolution would do more than anything else to elevate the medical profession to the plane it should occupy. If recognition should be restricted to the competent within the regular profession, why should it be extended to the incompetent outside?

HONI SOIT QUI MAL Y PENSE.

Madam Swetchine's aphorism, that we regard our own history as a prophecy for other people, nowhere receives stronger confirmation than in a recent editorial article in one of our San Francisco contemporaries. "*Nous voyons tout à travers nous-mêmes*," says Joubert. *Nous sommes un milieu tojours interposé entre les choses et nous.* We see everything through ourselves. We are a medium always interposed between ourselves and the world. To most of us the macrocosm is but an indefinite extension of the microcosm, and when a man, whose record of untiring and unselfish devotion to the best interests of the medical profession is yet to be made, speaks of the mortified motherhood and malignant fatherhood of other men's actions, we need not go far to seek the moral ancestry of his own. Out of the fullness of the heart the mouth speaketh.

The author of this article concludes with an exquisite example of sublime but unhappily and unconsciously inverted condescension—a gem so suited to its environment that we cheerfully refrain from exposing it to the perils of a new setting. Enough that never before was the sublime in such dangerous proximity to the ridiculous. The editor of the *Pacific Medical and Surgical Journal*, A. M., M. D., M. R. C. P., Lond. M. R. C. S., Eng., "forgiving" Levi C. Lane, is a spectacle fit for the delectation of the immortal gods of mirth.

AN AMBULANCE FOR THE SAN FRANCISCO RECEIVING HOSPITAL.

At a recent meeting of the San Francisco Board of Health, the Police Surgeon called attention to the need of an ambulance for use in connection with the Receiving Hospital. The institution of an ambulance service was strongly endorsed by the Board of Health, and a communication was ordered sent to the Board of Supervisors recommending that at least one ambulance be provided. At present the police patrol wagons are used for ambulance purposes, and, as far as they go, render excellent service. There are four wagons stationed in various parts of the city. When an accident occurs, an alarm is sent in to the nearest station, and the patrol wagon is on the spot in a very short time. Each wagon is provided with a stretcher, which is hung upon spiral springs when in use. This affords a very efficient means of transporting the injured to the hospital, and probably will never be entirely dispensed with, but the defects of the system lie in the lack of means for rendering first aid to the injured, and in the necessity of entrusting the handling of patients to unskilled persons. A surgeon with stimulants, restoratives, sedatives, and temporary dressings at command, should accompany each emergency call.

Another important use for an ambulance is in transporting cases away from the Receiving Hospital to the patients' homes, or to the various hospitals. The patrol wagons, except by special request, are not available for this purpose, and patients are often compelled to depend on express wagons and other unsuitable conveyances. Only one ambulance has been asked for, but when its practical working has been demonstrated more will be demanded.

CRIMINAL ABORTION AND THE "GREAT" DAILIES.

The following advertisements are the first two of a dozen similar ones appearing under the classification "Medical" in the columns of one of the self-constituted "leading" metropolitan dailies:

> All ladies, near or far, consult the ever reliable physician of 30 years wide practice, friend of invalids, men and women! Dr.——, the only qualified, all-trusty specialist, for sure, quick relief of irregularity or suppression any time or cause, by an improved painless method superior to all else; no instruments, no electricity; no fraud or wrong; disgrace and suffering avoided.
>
> Ladies, married or single, assured true sympathy, kind aid if in trouble, honest treatment, safe, easy cure guaranteed. Patients unsuccessfully treated or imposed upon by others, especially invited, Private home and board in confinement with best care and attendance of physician and nurse. Babies adopted. travellers attended; no delay and no failure. Terms reasonable to all. F. pills, strong, $2; Safeguard, $5. Sure remedies sent for home use. Call or write, free, strict confidence.

A sure, safe and speedy cure for all monthly irregularities from whatever cause; no instruments used; a home in confinement, with best possible care and comforts of home, with the skill and attention of a physician having had a long and successful practice; I can safely guarantee every case; I invite investigation of my method; consultation free and confidential; all ladies that are in trouble, sick and discouraged, should call on the doctor and state their case; they will find her to be a true friend to her sex, and will save time and money by consulting her before being treated elsewhere.

The "great" daily, from whose pages these advertisements were taken, is by no means the only one whose columns are at the service of the most cowardly and the most infamous of all murderers, the infanticide. The influence of such newspapers is degrading in the extreme. What warrant have we for believing that higher notions of morality prevail in other departments, the editorial department for instance, than in the department of "medicine?" None whatever. On the contrary, these newspapers assassinate reputations in just as cold blood as they abet the murder of the defenseless unborn. And why not? The greater includes the less, and the destruction of life is surely a greater crime than the destruction of reputation. Not ten days ago the "leading" metropolitan daily, already referred to, transformed one of the greatest misfortunes than can befall a human being, a misfortune that should evoke pity from a heart of stone, into a voluntary vice and paraded it before the public in gloating headliness that might have heralded the conquest of a province. And this is a "great daily's" conception of enterprise!

But our concern is with the purely "medical" aspect of the matter. We call on the respectable members of the secular press to put a stop, if not to criminal abortion, at least to its brazen promotion by the self-styled leaders of their profession.

VANITAS VANITATUM.

Charlatanry is not altogether unknown even in the ranks of regularly educated and licensed physicians. It is masked, of course, as diseases often are, but its manner, if not its voice, betrays it. Its most frequent and characteristic form is that of boasting and display. A recent instance came under our observation in the daily press. A physician, not yet marked by fame as all her own, wrote a plain certificate of health. This would seem to have been innocent and even banal enough, but one circumstance lifts it altogether out of the region of the common-place—to the signature of this plain certificate of health was appended a cauda nominis that might well be the despair of medical tuft-hunters the world over. The simple unassuming prefix doctor oftentimes conceals more knowledge than all these titles display, and at any rate, in America at least, is considered an ample endorsment of public statements of the kind it question.

NOTE.

The Board of Examiners.

At the regular meeting of the Board of Examiners, held may 2, 1893, the Board organized by electing W. B. Lewitt, President, and C. C. Wadsworth, Secretary.

MEMORANDA.

Dwarfing of the Radius.

In Hutchinson's *Archives of Surgery*, Miscellaneous Notes No. LXV, mention is made of a case of dwarfing of the radius occurring after an injury to its carpal end, sustained in early life. Hutchinson found the ulna about three-quarters of an inch longer than the radius, but causing very little obliquity in the position of the hand. "The wrist was simply placed at the distance named above the end of the ulna, the lower part of the forearm and hand being nearly straight." The accident had happened at the age of four. An apparently similar case is that of an officer at present on the San Francisco police force. While under treatment for a dislocation of his elbow, I noticed a remarkable projection of the ulna at the wrist. The extremity projected alongside the carpus for about three-quarters of an inch, and the wrist was set about the same distance back above the tip of the ulna. In this case there was considerable obliquity in the position of the hand, but it could easily be straightened out so as to be continuous with the forearm. Strength and motion did not seem impaired. At first, I thought the case an exaggerated deformity from a badly treated Collis fracture, but it is evidently a case such as Hutchinson describes. The man gave the following history: He is at present 37 years of age. When 8 or 9 years old, he fell and injured the left wrist. He was seen by a surgeon who could not detect a fracture, and diagnosed the case as a simple sprain. No particular trouble was ever felt in the use of the wrist, but he thinks that he first noticed deformity when about fifteen years old. For a few years thereafter the deformity gradually increased, until it reached its present condition.

San Francisco, Cal. GEO. B. SOMERS, M. D.

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting, April 25, 1893.

The President, F. L. ATKINSON, M. D., in the Chair.

California Northern District Medical Society.—DR. J. H. PARKINSON, of the committee appointed to convey an invitation to the California Northern District Medical Society to hold its next annual meeting in Sacramento, reported that the invitation was duly presented, and had been heartily accepted by the Society.

Probable Aneurism.—DR. W. R. CLUNESS reported the case of a man aged 49 years, by occupation a miner. He had been leaded repeatedly, 17 times in all. Six years ago he had consulted a physician for pain over the region of the heart, which had continued until recently when it left, attacking the right side. On examination the speaker discovered an aneurism of the arch, but could not distinguish any bruit. There was no difference in the radial pulse of either side. During the past two weeks patient had experienced considerable difficulty in swallowing. Scruple doses of iodide of potassium had relieved the pain.

DR. G. L. SIMMONS thought the circulation in the carotid on the right side was interfered with. In the absence of a bruit, he thought the diagnosis would point rather to a growth through which pulsation could be communicated. During the last ten years he had had two cases from Virginia City, in both of which the patients had been in habit of placing their breasts against the brake and pushing the car out of the slopes.

Dr. W. R. Cluness, Jr,, read a paper on "The Microscope and its Usefulness in General Practice as an Aid to Diagnosis."

Dr. W. E. Briggs said this subject was of the greatest importance at the present time. Bacteriology and microscopy were each a science, and physicians in practice had not time enough to devote to the subject in the line of original research. It was essential for the younger men to have some knowledge of bacteriology in order to understand modern medical literature.

Dr. W. H. Baldwin said, as an illustration of the importance of this subject, he had recently had a case in which the sputum showed the presence of the tubercle bacilli. These were also found in the intestinal discharges, in company with the bacillus of enteric fever.

Dr. G. L. Simmons said he had made, at one time, a special effort to inform himself in these branches, but soon found that a great deal of time would be required. During his first year at Harvard there was no department of microscopy. Oliver Wendell Homes was one of the first to interest himself in the subject, but since then it has made rapid advances.

Dr. C. E. Fowler said he was glad there was now some one here who was taking an interest in this subject. At present it was necessary to send pathological specimens elsewhere for examination.

Dr. W. R. Cluness of San Francisco said: To be proficient a person must necessarily devote a great deal of time to the subject, and this will unfit him for general practice. The subject is so immense that it will demand the lifework of an individual. It was of great practical importance. In the case of a patient with a contracted chest and stooping body, with every indication of a wasting disease, having coughed six months, and showing evidence of breaking down of both lungs, indicating consumption, examination of the sputum showed no bacilli, only the pneumococcus of Fränkel, showing that the man had pneumonia previous to the breaking down of the tissues. It was not uncommon to bring such cases to a successful issue that had hitherto been regarded as hopeless.

Dr. W. A. Briggs: Any one of the various sciences may be made the study of a lifetime, and no physician can pursue any of these special studies into their minute ramifications. Each should understand enough for practical use. Microscopy has become of such vast importance that the public expect physicians to make use of it in diagnosis and prognosis.

Dr. J. H. Parkinson: We all recognize the value of bacteriology and microscopy. To attain any degree of perfection in these sciences requires a great deal of hard work and much time. We are, however, also ignorant of practical microscopical work in relation to diagnosis. The possession of the necessary apparatus is of course the first essential, but when this has been attained, a short course will be sufficient to enable the practitioner to recognize such specimens as we ordinarily encounter. Difficult cases will still have to be referred to the specialist.

Dr. G. C. Simmons said: Koch, in 1883, determined the fact that cholera was due to the comma bacillus, and showed by culture that it flourished in an alkaline and not in an acid medium. The bacillus can be cultivated in from 12 to 24 hours, and thus the identity of the disease can be settled. The fact of its flourishing in an alkaline medium was of great importance in the matter of treatment.

Dr. T. W. Huntington: The benefit to be derived from this subject in general practice is, that it gives us a clue to the history of disease that we never had before. Greater advance has been made in the past fifteen years than in the previous five centuries. Tuberculosis, cholera, and typhoid fever had been identified bacteriologically, and other diseases had also been explained. The progress in practical surgery had also been very great, and as yet we are only on the threshold.

Dr. H. H. Look said this was one of the most useful auxiliaries in medical science. It had already made clear many dark spots in medicine. A man could not become an expert unless he devoted his whole time to the subject.

He remembered one case that had been diagnosed as phthisis by three physicians, but an examination of the sputum failed to reveal tubercle bacilli.

DR. S. M. MOUSER, of San Francisco, said there is no question about bacteriology being the dawn of advancement in the practice of medicine. Different organisms are found in cases of consumption besides the bacilli of tuberculosis. Streptococci are found in chronic bronchitis, and pneumococci in lobar pneumonia. The tubercle bacilli are found more often in the small white points than in the masses in the sputum. The presence of swarms of bacteria does not indicate that the patient will die in a short time. Sunlight is one of the best disinfectants for bacilli; a short exposure will kill those of tuberculosis. The practising physician has not time to become an expert in this branch, but all should learn to examine sputum. The preparation of cultures should be left to the specialist. The bacilli from anthrax in man have been cultivated, the culture inoculated and anthrax produced in guinea pigs. The cultivation of vaccinia and of leprosy have, so far, not succeeded.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, May 9, 1893.

The President, H. H. HART, M. D., in the Chair.

New Member.—H. PROSCHOLD, M. D., was duly elected a member of the Society.

Membranous Dysmenorrhea.—DR. JULES SIMON read a paper on membranous dysmenorrhea, and he presented complete membranous casts from the inner uterine surface. The membrane is ragged on its inner and smooth on the outer surface. The patient had suffered from a constant leucorrheal discharge.

DR. W. F. MCNUTT said the treatment of this disease was of especial interest. The etiology of the trouble is not well understood. It is perhaps a membranous exudation similar to diphtheria. The mucous membrane is not thrown off. He had proposed hysterectomy in one severe case of his own. All mucous membranes throw off membranous exudations as the bowels, bronchioles, bladder, etc.

DR. DAVIS said he never secured the membrane from the cavity of the uterus except in a disintegrated form. He believes it is to be *sui generis* and that its pathology is obscure, but that it does not begin independently of the mucous membrane. It nearly always occurs in barren or sterile women—he had never seen it in virgins. He therefore believes the mucous membrane to be involved. In his treatment he has always used iodoform in the uterus; he never curetted. He thinks anodynes and electricity good treatment. In applying electricity the negative pole should be placed in the uterus.

DR. W. F. CHENEY said that Dr. Tait calls the disease a membranous endometritis—the membrane follows as an exudation.

DR. T. G. THOMAS said there is doubt that various forms of membrane are thrown off. He does not consider it a tenable theory that ovarian excitement causes a membrane to be thrown off from the uterus. He thinks the microscopic examination ought to determine the kind of membrane—whether it contains utricular glands, etc. The treatment is only experimental and empirical.

DR. C. G. KENYON said he thought the mucous membrane was not involved. He had treated one case with equal parts of tincture of iodine and carbolic acid with success. A slight inflammation was set up and the membrane came away intact.

The resignations of Drs. C. N. Ellinwood and G. F. Hanson were read and accepted. The resignations of Drs. L. C. Lane and R. H. Plummer were read and ordered to be accepted as soon as arrears in dues were paid.

DR. HART thought some effort should be made to have such prominent members reconsider their action.

The resignation of Dr. C. C. Wadsworth as recording secretary was accepted and Dr. A. P. Woodward was elected to fill the vacancy.

It was decided to hold a joint meeting with the Technical Society of San Francisco, to listen to an address by Marsden Manson, Esq., on the subject of sewerage, hygiene, etc.

SPECIAL CORRESPONDENCE.

GERMANY.

[FROM OUR OWN CORRESPONDENT.]

Cystophotography.—Medical Meetings.—The Effects of Chloroform on the Kidneys.—Lady Doctors in Germany.—The Dispensaries.—Remedy for Diphtheria.—Adamkiewicz's Cancroin.

Quite a commotion was produced at a recent meeting of the Berlin Medical Society, when Dr. Nitze for the first time exhibited his photographs of portions of the human bladder, obtained from living subjects by the aid of the cystoscope. Nor was the enthusiasm of this otherwise so dignified and stately assembly unmerited. I have before me at the present moment five such photographs, representing respectively the normal mucous membrane with the orifice of a ureter; a polypus tumour in a *vessie à colonnes*, a papillomatous growth, a tuberculous ulcer, and a phosphatic concrement, all of which are plainly recognizable as such at first sight. The novelty of this achievement is not more surprising than the excellence of execution. Abortive attempts have, it is true, been made by other observers, but these pictures are the first possessing any real practical value. As a means of exact clinical record, for teaching purposes, for a better understanding of the condition of the bladder under pathological and physiological circumstances, this departure, which is the result of prolonged, ingenious and painstaking labor, will everywhere be welcomed warmly. Bladder diseases have, until recently, often presented the greatest difficulties of diagnosis, but now they are laid open to the most accurate and reliable investigation. For this we are in a great measure indebted to Nitze's former untiring perseverance in perfecting the cystoscope, which is crowned by his present valuable discovery of the method of cystoscopic photography.

Springtime is with us always the period of medical meetings. Apart from minor convocations, last month we had two, the Surgical Congress at Berlin and the meeting of physicians at Wiesbaden. At the latter, cholera was the subject of an interesting though unimpassioned discussion, while the former was chiefly remarkable for the reports on the question of anesthetics, regarding which, however, a decision was not arrived at, as the opinions of the various observers were much divided on the subject. The results of the statistics brought forward, however, confirm the observation that ether is undeniably the least dangerous to administer, a fact which other nations have long been familiar with, but which for some reason or other seems to have been ignored in our country. Naturally, surgeons who, like König of Göttingen, haved used chloroform for years without any fatal result, will be loath to recede from their accustomed practice, but in general it will be wise to give the preference to the least dangerous preparation.

In one of the Berlin Medical Associations, an interesting paper was lately read by Dr. Rindskopf, on the condition of the kidneys after chloroform narcosis. He had examined the urine of some 90 patients immediately after the administration of the anesthetic, and had found indications of changes in the uropoietic system in no less than one-third of the number. Twelve patients presented albuminuria, 6 of the cases being also complicated by casts, while 13 showed casts but no albumin. An increase of leucocytes in the urine was noted upwards of 30 times. Both albuminuria and casts were most prominent on the first day after the operation and generally disappeared by the third day. It was noticeable that the duration of the narcosis and the quantity of chloroform employed were generally in direct ratio to the degree of the pathological changes. Dr. Rindskopf very correctly points out that such observations should lead us to examine every patient carefully for diseases of the kidney before giving chloroform, and further, to avoid giving unnecessarily large doses of the drug, as likewise to be careful in submitting patients to it at too short intervals.

Great exertions have of late been made to obtain the right to study and practice medicine for ladies, in Germany. A movement has been set on foot to establish a high school or college for girls, a sort of German Girton College, which shall afford the same instruction as that of Gymnasia, a public school which prepares young men for the university. In the Reichstag, the *Freisinnige* party in particular, have determined to press this measure through, and very vigorous speeches have been made. Little headway, however, has been made in this direction, and weighty voices, too, have been raised in opposition.

Professor Dohrn, of Königsberg, a noted gynecologist, gives it as his opinion that medicine, especially obstetrics, is not a field in which women can, in general, expect to excel. He says his practical experience with Russian lady doctors in this department has been far from encouraging; and as he has plenty of opportunities, as a consultant, of giving advice in the neighboring Baltic provinces of Russia, his opinion must go for something. He states that of all the Russian ladies who, after completing their studies, notably in Zurich, have undertaken the practice of obstetrical medicine, not one has produced any really noteworthy or original work. In addition, he cites history to prove that as long as midwifery was practiced exclusively by females, no scientific advances were made in this branch, and that all, or nearly all, the progress achieved in the art has been due to male practitioners. On the other hand, he considers it a misfortune that so few ladies care to take up the calling of midwife. He points out that it would be an immense gain to society if the members of this very responsible and indispensible calling were not exclusively recruited from the inferior and illiterate classes, and that several well educated ladies of his acquaintance have, by devoting themselves to these duties, earned a highly respected and at the same time exceedingly lucrative position. Professor Leyden, of Berlin, also regards the proposed bill with disfavor; but in spite of all this, it is probable that it will obtain a majority ere long. Nor need we entertain any very serious apprehensions on the subject for, even without enlarging on the state of things in other countries where ladies exercise the calling of medical practitioners, this career is in general not such a thornless one as to entice very many of the weaker sex to devote themselves to it, and it is really only the very fittest that will survive in this struggle.

It has often been remarked that the study of pharmacy seems to present very little attractions to the female sex, although the difficulties connected with this calling are far less than those which lie in the way of the study of medicine. As the organization of our dispensaries has for some time past been a subject of discussion in the press, as well as in public assemblies, a few words on the question may not be out of place here. In order to acquire the right to take charge of a dispensary the following course has to be gone through: After completing a thorough course of preliminary instruction at a public school where Latin is one of the obligatory subjects, and after passing an examination qualifying him for the *Einjährigen Dienst* (i. e., the right to serve only one year in the army), the would-be pharmacist enters as apprentice for a term of three years with a pharmaceutical chemist. At the end of this time he is required to pass an examination in the rudiments of the art before a specially appointed commission, and may then style himself *Gehülfe*, or assistant pharmacist; after a further term of three years' practical work, for which, however, he receives a salary from his principal, he is permitted to attend lectures as a student at one of the universities for a year and a half, or two, or more, whereupon he has to undergo a very searching examination (staatsexamen). If successful, which is by no means always the case, he may now purchase a dispensary, or else look out for a situation as procurist or *Provisor* somewhere. But now comes the point where the great proportion of pharmacists arrive at a dead halt. No one is allowed to open a new dispensary in Germany unless the government sees fit to sanction such a proceeding. In parts where the population increases rapidly the authorities from time to time decide to give the concession for a new establishment. Persons desirous of obtaining the license (and their number is legion) then send in their applications, and one lucky man of them all gets the permit. Of course, this is like winning the great prize in the lottery, and any one who has the chance will do well to purchase a business, if he can, even at a high price. But this is by no means always an easy matter, and ever so many men remain in a dependent position all their lives. On the other hand, if one has succeeded in obtaining a dispensary one is quite sure of making his living as long as he does not commit any unpardonable acts of negligence or the like, and some chemists even manage to make quite a nice little pile, as no medical practitioner in Germany, except a small number of privileged homeopaths, cares to or even is permitted to do his own dispensing. As to the interests of the public, these are very well provided for in spite of the complaint occasionally raised that chemists make a hundred per cent. or more on their wares. The fact is that every detail of the process of dispensing is accurately regulated by parliamentary decrees; so much for weighing each ingredient (fluids also go by weight in Germany), so much for signing and corking, so much for the bottle or pot or box, so much for making up pills or powders. As all these details are priced in *Pfennige*, which are equal in value to one quarter of an American cent, the sum total amounts to a far smaller figure than would be paid for the same work in almost any other country. To make sure, however, that no inferior articles shall be supplied, the dispensaries are thoroughly inspected every two or three years by the authorities, and the stock of drugs, apparatus, etc., is rigorously examined. All in all, until the proposition of the social democrats that arrangements be made to provide medicine free of charge for all persons in want of it is realized, it is difficult to devise means for supplying the public with so good a quality at so low a price.

Some excitement was aroused a little while ago at Munich, by the remarkable success achieved by an unprofessional lady doctor, the widow of a chemist, in the treatment of diphtheria. The daily papers were full of her praise, and even physicians are reported to have allowed that a great number of patients had really recovered by the use of her medicine. In consequence, the government had taken steps to purchase her nostrum, which she had kept a profound secret, but as she demanded no less than one hundred thousand marks for the communication. an understanding had been delayed. Luckily a physician of the town, Dr. Krüche, managed to obtain a sample of the preparation, which on examination was found to consist of a decoction of a common herb, Vinca Minor, so that fortunately the public purse has been protected from an expenditure which would naturally have eventually proved a grand disappointment. Perhaps the homeopaths will make a trial with it, for their pharmacopea contains a tincture of the herb, with a notice to the effect of its having proved useful in sore throat and colds.

In one of my former letters I mentioned the experiments which Prof. Adamkiewicz undertook to establish the pathology and rational treatment of cancer, and the opposition which his first fragmentary communications encountered. He has now put forth a complete survey of his four years' laborious researches in this direction, and the opportunity is now given of thoroughly testing his theories. As the subject is still one of the most obscure as well as the most important, his publication will certainly be received with interest by all. He starts from the consideration of cancer as an infectious tumor, and his investigations have led to the discovery of the compound he calls *cancroin*, which he describes as Phenol-Vinyl-citronate, and which appears to be a toxine or ptomaine. This body is now obtainable for therapeutic purposes from Merck, of Darmstadt, and seems from the histories published to have a useful influence on the disorder. Let us hope that time will confirm the correctness of the author's observations.

May 8, 1893.

CORRESPONDENCE.

Mediastino-Pericarditis and Secondary Empyema.

Sir: As I was debared the pleasure of attending the recent meeting of the State Medical Society and participating in the discussion of my paper on "Mediastino-pericarditis and secondary empyema," I take this means of replying to the gentlemen who were kind enough to discuss my paper. I am entirely in accord with the statement of Dr. Shields, that it is a dangerous proceeding to wait too long before operating. It is a correct practice to operate as soon as we are convinced that pus is present; but if we see the case after a large accumulation of pus has occurred, the patient is usually in such a grave condition of impending collapse, pyemia and circulatory depression that any prolonged operation and the administration of an anesthetic is almost always contraindicated, and a rapid removal of the fluid may be fatal; so that I usually first tap and then incise. When we are dealing with a case of simple serous effusion, aseptic aspiration is the better procedure; but when pus is present, incision and probably resection of one or more ribs gives by far the best chances for ultimate recovery, hence I further agree with the statement of Dr. Shields, that aspiration as an operation for the cure of empyema does not seem to be very good practice.

I am further in accord with the statement that the mistake is usually made in not removing portions of enough ribs. In the young child, after stripping the periosteum from the rib, it is better to totally sever it, as the rapidity with which the growing child may reproduce the ribs, and thus do away with the object of our operation by replacing a firm bony encasement about the empyematous cavity, is remarkable. This has also been the experience of Ashby and Wright, as stated in the last edition of their book on "Diseases of Children." I cannot agree with Dr. Barbat and Dr. Gibbons in their statement, that many cases will recover without removal of the ribs. Recovery will only take place under these circumstances when the empyema has been discovered and correctly treated before actelectasis has occurred and before dense adhesions have bound the lung firmly in its abnormal position, but the consultant rarely sees a case until these two latter conditions have arisen. I am further entirely in accord with Dr. Kenyon, Dr. Wills and Dr. Lane. If a case of pleural effusion is seen early pus should never be allowed to form, but after waiting a reasonable time and using all endeavors to reduce the serous output, paracentesis thoracis should be performed, under strict antisepsis. These tappings may be repeated one or more times, and if the surgical technique is correct, pyemia will not result from our manipulations. If, however, pus has formed, in spite of all our care, or we are called late in the case, my practice has been to make the usual incision in the chest wall and introduce a drain prepared as follows: A rubber tube is selected of the proper length and calibre, this is doubled on itself and at the angle of flexion is incised, partly through its continuity, in such a manner as to produce two patulous tubes, not unlike the barrels of a double-barreled shot gun ; the free ends of this tube are passed through a piece of rubber drain and fastened with sterilized safety pins; the tube is now introduced through the incision and the rubber dam applies itself closely to the chest wall and is held firmly in place by capillary attraction, the tubes do not become displaced and cannot slip within the pleural cavity. Several tubes are thus prepared and kept in 3 per cent. carbolic solution. The tube is removed daily and a fresh one inserted. Careful daily measurements are taken of the empyematous cavity and the patient is instructed to blow from 100 to 1000 times a day through a rubber tube into a bucket of water or a spirometer may be used. This treatment is faithfully carried out for thirty to forty-five days, and then, if there is no marked decrease in the size of the empyemic cavity resection is performed. The incision is made by a vertical cut and the integuments slid from side to side to secure sufficient room, if this will not allow of sufficient space for easy manipulation an incision is made at right angles to the first, at the lowest extremity of the wound. The ribs are removed in such a manner as to leave a triangular space of the thoracic wall without bony encasement. Very Truly Yours,

San Diego, Cal. William A. Edwards.

OBITUARY.

DR. F. C. DURANT.

Dr. Fred. Curtis Durant, a member of this Society, died at Folsom in this county, on the 15th day of October, 1892, at the age of 44 years. He was born in Warren, Washington county, Vermont. His early education was acquired in Warren, Barre, and Burlington, of that State. At the age of eighteen he entered the medical department of Vermont University, graduating therefrom June 18, 1869, after which he attended a course of lectures at Bellevue College, N. Y.; then associated himself with his cousin, Dr. E. M. Curtis, in Orange, N. Y. In April, 1873, he came to Folsom, and engaged in general practice. In July, 1874, was married to Miss Belle Caples, daughter of Dr. Caples, of Elk Grove. In 1885 he was appointed visiting physician to the Folsom Prison, continuing till 1888, when he was appointed resident physician at San Quentin Prison, retaining the position till April, 1891, when he removed to Folsom, resuming general practice, which he continued till the time of his death. Dr. Durant was unable to meet with us often, but was interested in and appreciated the good works of our Society. Death overtook him suddenly and in the performance of his professional labors; therefore be it "Resolved, That in the death of Dr. Durant the Society mourns the loss of an esteemed member, the community in which he lived a worthy citizen and useful practitioner; that this Society will hold his memory with kindly feelings of respect, and extend its sympathy to his bereaved wife." H. L. Nichols, M.D., Chairman.

REVIEWS AND NOTICES.

A MANUAL OF MEDICAL JURISPRUDENCE AND TOXICOLOGY. By Henry C. Chapman, M. D., Professor of Institutes of Medicine and Medical Jurisprudence in the Jefferson Medical College of Philadelphia, etc., with 36 illustrations, some in colors. Philadelphia: W. B. Saunders; pp. 238. Price, $1.25.

This work covers the ground embraced in the course of lectures delivered by the author in the Jefferson Medical College. The book is offered simply as a manual for students and practitioners, but the subject of medical jurisprudence and toxicology is covered tersely, clearly, and completely. Of course, a book of this character cannot take the place of the more pretentious works on the subject, but good manuals, or text-books, are almost necessities to students and practitioners, for they serve as frameworks upon which to erect the larger structures of knowledge in the various branches of learning. The work is one of the best of the manuals on this subject.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners, held May 2, 1893, the following physicians, having complied with the law and the regulations of this Board, were unanimously granted certificates to practise medicine and surgery in this State:

Harry Rolland Adams, Santa Barbara; Coll. Phys. and Surg., Keokuk, Iowa, March 7, '93.
James Alexander Black, Nevada City; Kentucky School of Med., Ky., June 30, '92; Long Island Coll. Hosp., N. Y., March 22, '93.
Martha Dunn Corey (formerly Martha M. Dunn), Pacific Beach; Woman's Med. Coll. of Pa., March 13, '79.
F. S. Gould, Montecito; Med. Dept. City of New York, '78.
Henry Hagar, Los Angeles; Coll. Phys. and Surg., Keokuk, Iowa, June 10, '75.
David W. Hasson, Mentone; Med. Dept. State Univ., Iowa, March 7, '77.
James William Hood, Vina; Starling Med. Coll., Ohio, Feb. 26, '74.
Wm. J. Karlsioe, San Francisco; Med. Dept. Univ. Louisville, Ky., Mar. 13, '93.
Harry Newton Kierulff, Berkeley; Med Dept. State Univ., Iowa, March 9, '92.
C M. Mason, San Francisco; Med. Dept. Univ. Louisville, Ky., Feb. 28, '90.
Francis Henry Mead, San Francisco; the Univ. of Durham, Eng., June 23, '82; Royal Coll. Surg., Eng., Oct. 22, '85.
Sol. C. Mish, San Francisco; Kentucky School of Med., Ky., June 30, '92.
L. M. Pulsifer, Stockton; Med. Dept, Univ. City of N. Y., March, '88.
Franklin Hardin Sanborn, San Francisco; Med. Dept. Univ. of Cal., Dec. 13, '92.
A. J. Sanderson, Healdsburg; Cooper Med. Coll. Cal., Dec. 4, '91.
Chas. L. Stoddard, San Bernardino; Penn. Med, Coll., Pa., March 3, '60.
Dwight H. Trowbridge, Fowler; Med. Dept. Tulane Univ., La., April 5, 93.

CHAS. C. WADSWORTH, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific), from April 21, 1893, to May 20, 1893.

Major Johnson V. D. Middleton, Post Surgeon at Presidio of San Francisco, to be Deputy Surgeon General, with the rank of Lieutenant Colonel. May 8, 1893.

Leave of absence for one month on surgeon's certificate of disability is granted Major Samuel M. Horton, Surgeon, San Diego Barracks, Cal

Captain Richard W. Johnson, Assistant Surgeon, relieved from duty at Fort Bowie, Arizona, and ordered to duty at Washington Barracks, D. C.

Captain William J. Wakeman, Assistant Surgeon, relieved from duty at Fort Bidwell, California, and ordered to Fort Thomas, Kentucky, for duty.

Captain Louis Brechemin, Assistant Surgeon, is relieved from duty at the Presidio of San Francisco, Cal., and ordered to Columbus Barracks, Ohio, for duty.

First Lieutenant Charles Willcox, Assistant Surgeon, relieved from temporary duty at Angel Island, Cal., and ordered to Presidio of San Francisco, Cal., for duty.

The leave of absence granted Lieutenant Colonel Charles C. Byrne, Deputy Surgeon General, Medical Director, Headquarters Dept. of Columbia, is hereby extended one month.

First Lieutenant Ogden Rafferty, Assistant Surgeon, Alcatraz Island, Dept. of California, to be Assistant Surgeon, with the rank of Captain, from March 26, 1893, after five years' service, in conformity with the Act of June 23, 1874.

First Lieutenant Francis A. Winter, Assistant Surgeon, is relieved from duty at Fort Wingate, N. M., and will report in person to the senior commissioner of the International Boundary Survey Commission at Yuma, A. T., for duty, relieving First Lieutenant Harlan E. McVay, Assistant Surgeon.

First Lieutenant McVay, on being relieved by First Lieutenant Winter, will report in person to the commanding officer San Carlos, A. T., for duty at that station, relieving Captain Paul Shillock, Assistant Surgeon.

Captain Shillock, on being relieved by First Lieutenant McVay, will report in person to the commanding officer, Fort Wingate, N. M., for duty at that post.